

PRAGMATISM

and four essays from *The Meaning of Truth*

WILLIAM JAMES

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Editor's preface

The publication of *Pragmatism* in 1907 was followed two years later by *The Meaning of Truth, A Sequel to Pragmatism*. The latter volume was made up largely of replies to criticisms evoked by the former, but it included three essays written before *Pragmatism* which throw an important light on the development of the author's thought. With these additions the present volume serves as a complete and systematic presentation of the doctrine for which it is named.

RALPH BARTON PERRY

Cambridge, Massachusetts
September 1, 1942

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Author's Dedication of Pragmatism

TO THE MEMORY OF JOHN STUART MILL
FROM WHOM I FIRST LEARNED THE
PRAGMATIC OPENNESS OF MIND
AND WHOM MY FANCY LIKES TO PICTURE AS
OUR LEADER WERE HE ALIVE TO-DAY

Author's preface to Pragmatism

The lectures that follow were delivered at the Lowell Institute in Boston in November and December, 1906, and in January, 1907, at Columbia University, in New York. They are printed as delivered, without developments or notes. The pragmatic movement, so-called—I do not like the name, but apparently it is too late to change it—seems to have rather suddenly precipitated itself out of the air. A number of tendencies that have always existed in philosophy have all at once become conscious of themselves collectively, and of their combined mission; and this has occurred in so many countries, and from so many different points of view, that much unconcerted statement has resulted. I have sought to unify the picture as it presents itself to my own eyes, dealing in broad strokes, and avoiding minute controversy. Much futile controversy might have been avoided, I believe, if our critics had been willing to wait until we got our message fairly out.

If my lectures interest any reader in the general subject, he will doubtless wish to read farther. I therefore give him a few references.

In America, JOHN DEWEY's 'Studies in Logical Theory' are the foundation. Read also by DEWEY the articles in the *Philosophical Review*, vol. xv, pp. 113 and 465, in *Mind*, vol. xv,

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p. 293, and in the *Journal of Philosophy*, vol. iv, p. 197.

Probably the best statements to begin with, however, are F. C. S. SCHILLER's in his '*Studies in Humanism*,' especially the essays numbered i, v, vi, vii, xviii and xix. His previous essays and in general the polemic literature of the subject are fully referred to in his footnotes.

Furthermore, see J. MILHAUD: *le Rationnel*, 1898, and the fine articles by LE ROY in the *Revue de Métaphysique*, vols. 7, 8 and 9. Also articles by BLONDEL and DE SAILLY in the *Annales de Philosophie Chrétienne*, 4^{me} Série, vols. 2 and 3. PAPINI announces a book on Pragmatism, in the French language, to be published very soon.

To avoid one misunderstanding at least, let me say that there is no logical connexion between pragmatism, as I understand it, and a doctrine which I have recently set forth as 'radical empiricism.' The latter stands on its own feet. One may entirely reject it and still be a pragmatist.

HARVARD UNIVERSITY, April, 1907.

ONE: *The Dilemma in Philosophy*

THE PRESENT DILEMMA IN PHILOSOPHY

In the preface to that admirable collection of essays of his called 'Heretics,' Mr. Chesterton writes these words: "There are some people—and I am one of them—who think that the most practical and important thing about a man is still his view of the universe. We think that for a landlady considering a lodger it is important to know his income, but still more important to know his philosophy. We think that for a general about to fight an enemy it is important to know the enemy's numbers, but still more important to know the enemy's philosophy. We think the question is not whether the theory of the cosmos affects matters, but whether in the long run anything else affects them."

I think with Mr. Chesterton in this matter. I know that you, ladies and gentlemen, have a philosophy, each and all of you, and that the most interesting and important thing about you is the way in which it determines the perspective in your several worlds. You know the same of me. And yet I confess to a certain tremor at the audacity of the enterprise which I am about to begin. For the philosophy which is so important in each of us is not a technical matter; it is our more or less dumb sense of

what life honestly and deeply means. It is only partly got from books; it is our individual way of just seeing and feeling the total push and pressure of the cosmos. I have no right to assume that many of you are students of the cosmos in the classroom sense, yet here I stand desirous of interesting you in a philosophy which to no small extent has to be technically treated. I wish to fill you with sympathy with a contemporaneous tendency in which I profoundly believe, and yet I have to talk like a professor to you who are not students. Whatever universe a professor believes in must at any rate be a universe that lends itself to lengthy discourse. A universe definable in two sentences is something for which the professorial intellect has no use. No faith in anything of that cheap kind! I have heard friends and colleagues try to popularize philosophy in this very hall, but they soon grew dry, and then technical, and the results were only partially encouraging. So my enterprise is a bold one. The founder of pragmatism himself recently gave a course of lectures at the Lowell Institute with that very word in its title,—flashes of brilliant light relieved against Cimmerian darkness! None of us, I fancy, understood *all* that he said—yet here I stand, making a very similar venture.

I risk it because the very lectures I speak of *drew*—they brought good audiences. There is, it must be confessed, a curious fascination in hearing deep things talked about, even though neither we nor the disputants understand them. We get the problematic thrill, we feel the presence of the vastness. Let a controversy begin in a smoking-room anywhere, about free-will or God's omniscience, or good and evil, and see how every one in the place pricks up his ears. Philosophy's results concern us all most vitally, and philosophy's queerest arguments tickle agreeably our sense of subtlety and ingenuity.

Believing in philosophy myself devoutly, and believing also that a kind of new dawn is breaking upon us

philosophers, I feel impelled, *per fas aut nefas*, to try to impart to you some news of the situation.

Philosophy is at once the most sublime and the most trivial of human pursuits. It works in the minutest cran- nies and it opens out the widest vistas. It 'bakes no bread,' as has been said, but it can inspire our souls with courage; and repugnant as its manners, its doubting and challenging, its quibbling and dialectics, often are to common people, no one of us can get along without the far-flashing beams of light it sends over the world's perspectives. These illuminations at least, and the contrast-effects of darkness and mystery that accompany them, give to what it says an interest that is much more than professional.

The history of philosophy is to a great extent that of a certain clash of human temperaments. Undignified as such a treatment may seem to some of my colleagues, I shall have to take account of this clash and explain a good many of the divergencies of philosophers by it. Of whatever temperament a professional philosopher is, he tries, when philosophizing, to sink the fact of his temperament. Temperament is no conventionally recognized reason, so he urges impersonal reasons only for his conclusions. Yet his temperament really gives him a stronger bias than any of his more strictly objective premises. It loads the evidence for him one way or the other, making for a more sentimental or a more hard-hearted view of the universe, just as this fact or that principle would. He *trusts* his temperament. Wanting a universe that suits it, he believes in any representation of the universe that does suit it. He feels men of opposite temper to be out of key with the world's character, and in his heart considers them incompetent and 'not in it,' in the philosophic business, even though they may far excel him in dialectical ability.

Yet in the forum he can make no claim, on the bare ground of his temperament, to superior discernment or

authority. There arises thus a certain insincerity in our philosophic discussions: the potentest of all our premises is never mentioned. I am sure it would contribute to clearness if in these lectures we should break this rule and mention it, and I accordingly feel free to do so.

Of course I am talking here of very positively marked men, men of radical idiosyncrasy, who have set their stamp and likeness on philosophy and figure in its history. Plato, Locke, Hegel, Spencer, are such temperamental thinkers. Most of us have, of course, no very definite intellectual temperament, we are a mixture of opposite ingredients, each one present very moderately. We hardly know our own preferences in abstract matters; some of us are easily talked out of them, and end by following the fashion or taking up with the beliefs of the most impressive philosopher in our neighborhood, whoever he may be. But the one thing that has *counted* so far in philosophy is that a man should *see* things, see them straight in his own peculiar way, and be dissatisfied with any opposite way of seeing them. There is no reason to suppose that this strong temperamental vision is from now onward to count no longer in the history of man's beliefs.

Now the particular difference of temperament that I have in mind in making these remarks is one that has counted in literature, art, government, and manners as well as in philosophy. In manners we find formalists and free-and-easy persons. In government, authoritarians and anarchists. In literature, purists or academicals, and realists. In art, classics and romantics. You recognize these contrasts as familiar; well, in philosophy we have a very similar contrast expressed in the pair of terms 'rationalist' and 'empiricist,' 'empiricist' meaning your lover of facts in all their crude variety, 'rationalist' meaning your devotee to abstract and eternal principles. No one can live an hour without both facts and principles, so it is a differ-

ence rather of emphasis; yet it breeds antipathies of the most pungent character between those who lay the emphasis differently; and we shall find it extraordinarily convenient to express a certain contrast in men's ways of taking their universe, by talking of the 'empiricist' and of the 'rationalist' temper. These terms make the contrast simple and massive.

More simple and massive than are usually the men of whom the terms are predicated. For every sort of permutation and combination is possible in human nature; and if I now proceed to define more fully what I have in mind when I speak of rationalists and empiricists, by adding to each of those titles some secondary qualifying characteristics, I beg you to regard my conduct as to a certain extent arbitrary. I select types of combination that nature offers very frequently, but by no means uniformly, and I select them solely for their convenience in helping me to my ulterior purpose of characterizing pragmatism. Historically we find the terms 'intellectualism' and 'sensationalism' used as synonyms of 'rationalism' and 'empiricism.' Well, nature seems to combine most frequently with intellectualism an idealistic and optimistic tendency. Empiricists on the other hand are not uncommonly materialistic, and their optimism is apt to be decidedly conditional and tremulous. Rationalism is always monistic. It starts from wholes and universals, and makes much of the unity of things. Empiricism starts from the parts, and makes of the whole a collection—is not averse therefore to calling itself pluralistic. Rationalism usually considers itself more religious than empiricism, but there is much to say about this claim, so I merely mention it. It is a true claim when the individual rationalist is what is called a man of feeling, and when the individual empiricist prides himself on being hard-headed. In that case the rationalist will usually also be in favor of what is called free-will, and the empiricist will be a fatalist—I use the terms most

popularly current. The rationalist finally will be of dogmatic temper in his affirmations, while the empiricist may be more sceptical and open to discussion.

I will write these traits down in two columns. I think you will practically recognize the two types of mental make-up that I mean if I head the columns by the titles 'tender-minded' and 'tough-minded' respectively.

THE TENDER-MINDED.

Rationalistic (going by
'principles'),
Intellectualistic,
Idealistic,
Optimistic,
Religious,
Free-willist,
Monistic,
Dogmatical.

THE TOUGH-MINDED.

Empiricist (going by
'facts'),
Sensationalistic,
Materialistic,
Pessimistic,
Irreligious,
Fatalistic,
Pluralistic,
Sceptical.

Pray postpone for a moment the question whether the two contrasted mixtures which I have written down are each inwardly coherent and self-consistent or not—I shall very soon have a good deal to say on that point. It suffices for our immediate purpose that tender-minded and tough-minded people, characterized as I have written them down, do both exist. Each of you probably knows some well-marked example of each type, and you know what each example thinks of the example on the other side of the line. They have a low opinion of each other. Their antagonism, whenever as individuals their temperaments have been intense, has formed in all ages a part of the philosophic atmosphere of the time. It forms a part of the philosophic atmosphere to-day. The tough think of the tender as sentimentalists and soft-heads. The tender feel the tough to be unrefined, callous, or brutal. Their mutual reaction is very much like that that takes place when Bostonian tourists mingle with a population like

that of Cripple Creek. Each type believes the other to be inferior to itself; but disdain in the one case is mingled with amusement, in the other it has a dash of fear.

Now, as I have already insisted, few of us are tender-foot Bostonians pure and simple, and few are typical Rocky Mountain toughs, in philosophy. Most of us have a hankering for the good things on both sides of the line. Facts are good, of course—give us lots of facts. Principles are good—give us plenty of principles. The world is indubitably one if you look at it in one way, but as indubitably is it many, if you look at it in another. It is both one and many—let us adopt a sort of pluralistic monism. Everything of course is necessarily determined, and yet of course our wills are free: a sort of free-will determinism is the true philosophy. The evil of the parts is undeniable, but the whole can't be evil: so practical pessimism may be combined with metaphysical optimism. And so forth—your ordinary philosophic layman never being a radical, never straightening out his system, but living vaguely in one plausible compartment of it or another to suit the temptations of successive hours.

But some of us are more than mere laymen in philosophy. We are worthy of the name of amateur athletes, and are vexed by too much inconsistency and vacillation in our creed. We cannot preserve a good intellectual conscience so long as we keep mixing incompatibles from opposite sides of the line.

And now I come to the first positively important point which I wish to make. Never were as many men of a decidedly empiricist proclivity in existence as there are at the present day. Our children, one may say, are almost born scientific. But our esteem for facts has not neutralized in us all religiousness. It is itself almost religious. Our scientific temper is devout. Now take a man of this type, and let him be also a philosophic amateur, unwilling to mix a hodge-podge system after the fashion of a common

layman, and what does he find his situation to be, in this blessed year of our Lord 1906? He wants facts; he wants science; but he also wants a religion. And being an amateur and not an independent originator in philosophy he naturally looks for guidance to the experts and professionals whom he finds already in the field. A very large number of you here present, possibly a majority of you, are amateurs of just this sort.

Now what kinds of philosophy do you find actually offered to meet your need? You find an empirical philosophy that is not religious enough, and a religious philosophy that is not empirical enough for your purpose. If you look to the quarter where facts are most considered you find the whole tough-minded program in operation, and the 'conflict between science and religion' in full blast. Either it is that Rocky Mountain tough of a Haeckel with his materialistic monism, his ether-god and his jest at your God as a 'gaseous vertebrate'; or it is Spencer treating the world's history as a redistribution of matter and motion solely, and bowing religion politely out at the front door:—she may indeed continue to exist, but she must never show her face inside the temple.

For a hundred and fifty years past the progress of science has seemed to mean the enlargement of the material universe and the diminution of man's importance. The result is what one may call the growth of naturalistic or positivistic feeling. Man is no lawgiver to nature, he is an absorber. She it is who stands firm; he it is who must accommodate himself. Let him record truth, inhuman though it be, and submit to it! The romantic spontaneity and courage are gone, the vision is materialistic and depressing. Ideals appear as inert by-products of physiology; what is higher is explained by what is lower and treated forever as a case of 'nothing but'—nothing but something else of a quite inferior sort. You get, in short,

a materialistic universe, in which only the tough-minded find themselves congenially at home.

If now, on the other hand, you turn to the religious quarter for consolation, and take counsel of the tender-minded philosophies, what do you find?

Religious philosophy in our day and generation is, among us English-reading people, of two main types. One of these is more radical and aggressive, the other has more the air of fighting a slow retreat. By the more radical wing of religious philosophy I mean the so-called transcendental idealism of the Anglo-Hegelian school, the philosophy of such men as Green, the Cairds, Bosanquet, and Royce. This philosophy has greatly influenced the more studious members of our protestant ministry. It is pantheistic, and undoubtedly it has already blunted the edge of the traditional theism in protestantism at large.

That theism remains, however. It is the lineal descendant, through one stage of concession after another, of the dogmatic scholastic theism still taught rigorously in the seminaries of the catholic church. For a long time it used to be called among us the philosophy of the Scottish school. It is what I meant by the philosophy that has the air of fighting a slow retreat. Between the encroachments of the hegelians and other philosophers of the 'Absolute,' on the one hand, and those of the scientific evolutionists and agnostics, on the other, the men that give us this kind of a philosophy, James Martineau, Professor Bowne, Professor Ladd and others, must feel themselves rather tightly squeezed. Fair-minded and candid as you like, this philosophy is not radical in temper. It is eclectic, a thing of compromises, that seeks a *modus vivendi* above all things. It accepts the facts of Darwinism, the facts of cerebral physiology, but it does nothing active or enthusiastic with them. It lacks the victorious and aggressive note. It lacks *prestige* in consequence; whereas absolut-

ism has a certain *prestige* due to the more radical style of it.

These two systems are what you have to choose between if you turn to the tender-minded school. And if you are the lovers of facts I have supposed you to be, you find the trail of the serpent of rationalism, of intellectualism, over everything that lies on that side of the line. You escape indeed the materialism that goes with the reigning empiricism; but you pay for your escape by losing contact with the concrete parts of life. The more absolutistic philosophers dwell on so high a level of abstraction that they never even try to come down. The absolute mind which they offer us, the mind that makes our universe by thinking it, might, for aught they show us to the contrary, have made any one of a million other universes just as well as this. You can deduce no single actual particular from the notion of it. It is compatible with any state of things whatever being true here below. And the theistic God is almost as sterile a principle. You have to go to the world which he has created to get any inkling of his actual character: he is the kind of god that has once for all made that kind of a world. The God of the theistic writers lives on as purely abstract heights as does the Absolute. Absolutism has a certain sweep and dash about it, while the usual theism is more insipid, but both are equally remote and vacuous. What *you* want is a philosophy that will not only exercise your powers of intellectual abstraction, but that will make some positive connexion with this actual world of finite human lives.

You want a system that will combine both things, the scientific loyalty to facts and willingness to take account of them, the spirit of adaptation and accommodation, in short, but also the old confidence in human values and the resultant spontaneity, whether of the religious or of the romantic type. And this is then your dilemma: you find the two parts of your *quacsitum* hopelessly separated.

You find empiricism with inhumanism and irreligion; or else you find a rationalistic philosophy that indeed may call itself religious, but that keeps out of all definite touch with concrete facts and joys and sorrows.

I am not sure how many of you live close enough to philosophy to realize fully what I mean by this last reproach, so I will dwell a little longer on that unreality in all rationalistic systems by which your serious believer in facts is so apt to feel repelled.

I wish that I had saved the first couple of pages of a thesis which a student handed me a year or two ago. They illustrated my point so clearly that I am sorry I can not read them to you now. This young man, who was a graduate of some Western college, began by saying that he had always taken for granted that when you entered a philosophic classroom you had to open relations with a universe entirely distinct from the one you left behind you in the street. The two were supposed, he said, to have so little to do with each other, that you could not possibly occupy your mind with them at the same time. The world of concrete personal experiences to which the street belongs is multitudinous beyond imagination, tangled, muddy, painful and perplexed. The world to which your philosophy-professor introduces you is simple, clean and noble. The contradictions of real life are absent from it. Its architecture is classic. Principles of reason trace its outlines, logical necessities cement its parts. Purity and dignity are what it most expresses. It is a kind of marble temple shining on a hill.

In point of fact it is far less an account of this actual world than a clear addition built upon it, a classic sanctuary in which the rationalist fancy may take refuge from the intolerably confused and gothic character which mere facts present. It is no *explanation* of our concrete universe, it is another thing altogether, a substitute for it, a remedy, a way of escape.

Its temperament, if I may use the word temperament here, is utterly alien to the temperament of existence in the concrete. *Refinement* is what characterizes our intellectualist philosophies. They exquisitely satisfy that craving for a refined object of contemplation which is so powerful an appetite of the mind. But I ask you in all seriousness to look abroad on this colossal universe of concrete facts, on their awful bewilderments, their surprises and cruelties, on the wilderness which they show, and then to tell me whether 'refined' is the one inevitable descriptive adjective that springs to your lips.

Refinement has its place in things, true enough. But a philosophy that breathes out nothing but refinement will never satisfy the empiricist temper of mind. It will seem rather a monument of artificiality. So we find men of science preferring to turn their backs on metaphysics as on something altogether cloistered and spectral, and practical men shaking philosophy's dust off their feet and following the call of the wild.

Truly there is something a little ghastly in the satisfaction with which a pure but unreal system will fill a rationalist mind. Leibnitz was a rationalist mind, with infinitely more interest in facts than most rationalist minds can show. Yet if you wish for superficiality incarnate, you have only to read that charmingly written *'Théodicée'* of his, in which he sought to justify the ways of God to man, and to prove that the world we live in is the best of possible worlds. Let me quote a specimen of what I mean.

Among other obstacles to his optimistic philosophy, it falls to Leibnitz to consider the number of the eternally damned. That it is infinitely greater, in our human case, than that of those saved, he assumes as a premise from the theologians, and then proceeds to argue in this way. Even then, he says:

"The evil will appear as almost nothing in comparison with the good, if we once consider the real magnitude of

Leibnitz continues elsewhere:

"There is a kind of justice which aims neither at the amendment of the criminal, nor at furnishing an example to others, nor at the reparation of the injury. This justice is founded in pure fitness, which finds a certain satisfaction in the expiation of a wicked deed. The Socinians and Hobbes objected to this punitive justice, which is properly vindictive justice, and which God has reserved for himself at many junctures. . . . It is always founded in the fitness of things, and satisfies not only the offended party, but all wise lookers-on, even as beautiful music or a fine piece of architecture satisfies a well-constituted mind. It is thus that the torments of the damned continue, even tho they serve no longer to turn any one away from sin, and that the rewards of the blest continue, even tho they confirm no one in good ways. The damned draw to themselves ever new penalties by their continuing sins, and the blest attract ever fresh joys by their unceasing progress in good. Both facts are founded on the principle of fitness, . . . for God has made all things harmonious in perfection as I have already said."

Leibnitz's feeble grasp of reality is too obvious to need comment from me. It is evident that no realistic image of the experience of a damned soul had ever approached the portals of his mind. Nor had it occurred to him that the smaller is the number of 'samples' of the genus 'lost-soul' whom God throws as a sop to the eternal fitness, the more unequivocally grounded is the glory of the blest. What he gives us is a cold literary exercise, whose cheerful substance even hell-fire does not warm.

And do not tell me that to show the shallowness of rationalist philosophizing I have had to go back to a shallow wigged age. The optimism of present-day rationalism sounds just as shallow to the fact-loving mind. The actual universe is a thing wide open, but rationalism makes systems, and systems must be closed. For men in

Leibnitz continues elsewhere:

"There is a kind of justice which aims neither at the amendment of the criminal, nor at furnishing an example to others, nor at the reparation of the injury. This justice is founded in pure fitness, which finds a certain satisfaction in the expiation of a wicked deed. The Socinians and Hobbes objected to this punitive justice, which is properly vindictive justice, and which God has reserved for himself at many junctures. . . . It is always founded in the fitness of things, and satisfies not only the offended party, but all wise lookers-on, even as beautiful music or a fine piece of architecture satisfies a well-constituted mind. It is thus that the torments of the damned continue, even tho they serve no longer to turn any one away from sin, and that the rewards of the blest continue, even tho they confirm no one in good ways. The damned draw to themselves ever new penalties by their continuing sins, and the blest attract ever fresh joys by their unceasing progress in good. Both facts are founded on the principle of fitness, . . . for God has made all things harmonious in perfection as I have already said."

Leibnitz's feeble grasp of reality is too obvious to need comment from me. It is evident that no realistic image of the experience of a damned soul had ever approached the portals of his mind. Nor had it occurred to him that the smaller is the number of 'samples' of the genus 'lost-soul' whom God throws as a sop to the eternal fitness, the more unequivocally grounded is the glory of the blest. What he gives us is a cold literary exercise, whose cheerful substance even hell-fire does not warm.

And do not tell me that to show the shallowness of rationalist philosophizing I have had to go back to a shallow wigpated age. The optimism of present-day rationalism sounds just as shallow to the fact-loving mind. The actual universe is a thing wide open, but rationalism makes systems, and systems must be closed. For men in

practical life perfection is something far off and still in process of achievement. This for rationalism is but the illusion of the finite and relative: the absolute ground of things is a perfection eternally complete.

I find a fine example of revolt against the airy and shallow optimism of current religious philosophy in a publication of that valiant anarchistic writer Morrison I. Swift. Mr. Swift's anarchism goes a little farther than mine does, but I confess that I sympathize a good deal, and some of you, I know, will sympathize heartily with his dissatisfaction with the idealistic optimisms now in vogue. He begins his pamphlet on 'Human Submission' with a series of city reporter's items from newspapers (suicides, deaths from starvation, and the like) as specimens of our civilized régime. For instance:

"After trudging through the snow from one end of the city to the other in the vain hope of securing employment, and with his wife and six children without food and ordered to leave their home in an upper east-side tenement-house because of non-payment of rent, John Corcoran, a clerk, to-day ended his life by drinking car-bolic acid. Corcoran lost his position three weeks ago through illness, and during the period of idleness his scanty savings disappeared. Yesterday he obtained work with a gang of city snow-shovelers, but he was too weak from illness, and was forced to quit after an hour's trial with the shovel. Then the weary task of looking for employment was again resumed. Thoroughly discouraged, Corcoran returned to his home last night to find his wife and children without food and the notice of dispossession on the door. On the following morning he drank the poison.

"The records of many more such cases lie before me [Mr. Swift goes on]; an encyclopedia might easily be filled with their kind. These few I cite as an interpretation of the Universe. We are aware of the presence of God

in his world,' says a writer in a recent English review. [The very presence of ill in the temporal order is the condition of the perfection of the eternal order, writes Professor Royce (*The World and the Individual*, II, 385).] 'The Absolute is the richer for every discord and for all the diversity which it embraces,' says F. H. Bradley (*Appearance and Reality*, 204). He means that these slain men make the universe richer, and that is philosophy. But while Professors Royce and Bradley and a whole host of guileless thoroughfeds are unveiling Reality and the Absolute and explaining away evil and pain, this is the condition of the only beings known to us anywhere in the universe with a developed consciousness of what the universe is. What these people experience is Reality. It gives us an absolute phase of the universe. It is the personal experience of those best qualified in our circle of knowledge to *have* experience, to tell us *what is*. Now what does *thinking about* the experience of these persons come to, compared to directly and personally feeling it as they feel it? The philosophers are dealing in shades, while those who live and feel know truth. And the mind of mankind—not yet the mind of philosophers and of the proprietary class—but of the great mass of the silently thinking men and feeling men, is coming to this view. They are judging the universe as they have hitherto permitted the hierophants of religion and learning to judge *them*. . . .

"This Cleveland workingman, killing his children and himself [another of the cited cases] is one of the elemental stupendous facts of this modern world and of this universe. It cannot be glozed over or minimized away by all the treatises on God, and Love, and Being, helplessly existing in their monumental vacuity. This is one of the simple irreducible elements of this world's life, after millions of years of opportunity and twenty centuries of Christ. It is in the mental world what atoms or sub-atoms are in the

physical, primary, indestructible. And what it blazons to man is the imposture of all philosophy which does not see in such events the consummate factor of all conscious experience. These facts invincibly prove religion a nullity. Man will not give religion two thousand centuries or twenty centuries more to try itself and waste human time. Its time is up; its probation is ended; its own record ends it. Mankind has not æons and eternities to spare for trying out discredited systems." ¹

Such is the reaction of an empiricist mind upon the rationalist bill of fare. It is an absolute 'No, I thank you.' 'Religion,' says Mr. Swift, 'is like a sleep-walker to whom actual things are blank.' And such, tho possibly less tensely charged with feeling, is the verdict of every seriously inquiring amateur in philosophy to-day who turns to the philosophy-professors for the wherewithal to satisfy the fulness of his nature's needs. Empiricist writers give him a materialism, rationalists give him something religious, but to that religion 'actual things are blank.' He becomes thus the judge of us philosophers. Tender or tough, he finds us wanting. None of us may treat his verdicts disdainfully, for after all, his is the typically perfect mind, the mind the sum of whose demands is greatest, the mind whose criticisms and dissatisfactions are fatal in the long run.

It is at this point that my own solution begins to appear. I offer the oddly-named thing pragmatism as a philosophy that can satisfy both kinds of demand. It can remain religious like the rationalisms, but at the same time, like the empiricisms, it can preserve the richest intimacy with facts. I hope I may be able to leave many of you with as favorable an opinion of it as I preserve myself. Yet, as I am near the end of my hour, I will not introduce pragmatism bodily now. I will begin with it on the stroke of the clock next time. I prefer at the present moment to return a little on what I have said.

If any of you here are professional philosophers, and some of you I know to be such, you will doubtless have felt my discourse so far to have been crude in an unpardonable, nay, in an almost incredible degree. Tender-minded and tough-minded, what a barbaric disjunction! And, in general, when philosophy is all compacted of delicate intellectualities and subtleties and scrupulosities, and when every possible sort of combination and transition obtains within its bounds, what a brutal caricature and reduction of highest things to the lowest possible expression is it to represent its field of conflict as a sort of rough-and-tumble fight between two hostile temperaments! What a childish external view! And again, how stupid it is to treat the abstractness of rationalist systems as a crime, and to damn them because they offer themselves as sanctuaries and places of escape, rather than as prolongations of the world of facts. Are not all our theories just remedies and places of escape? And, if philosophy is to be religious, how can she be anything else than a place of escape from the crassness of reality's surface? What better thing can she do than raise us out of our animal senses and show us another and a nobler home for our minds in that great framework of ideal principles subtending all reality, which the intellect divines? How can principles and general views ever be anything but abstract outlines? Was Cologne cathedral built without an architect's plan on paper? Is refinement in itself an abomination? Is concrete rudeness the only thing that's true?

Believe me, I feel the full force of the indictment. The picture I have given is indeed monstrously oversimplified and rude. But like all abstractions, it will prove to have its use. If philosophers can treat the life of the universe abstractly, they must not complain of an abstract treatment of the life of philosophy itself. In point of fact the picture I have given is, however coarse and sketchy,

literally true. Temperaments with their cravings and refusals do determine men in their philosophies, and always will. The details of systems may be reasoned out piecemeal, and when the student is working at a system, he may often forget the forest for the single tree. But when the labor is accomplished, the mind always performs its big summarizing act, and the system forthwith stands over against one like a living thing, with that strange simple note of individuality which haunts our memory, like the wraith of the man, when a friend or enemy of ours is dead.

Not only Walt Whitman could write 'who touches this book touches a man.' The books of all the great philosophers are like so many men. Our sense of an essential personal flavor in each one of them, typical but indescribable, is the finest fruit of our own accomplished philosophic education. What the system pretends to be is a picture of the great universe of God. What it is,—and oh so flagrantly!—is the revelation of how intensely odd the personal flavor of some fellow creature is. Once reduced to these terms (and all our philosophies get reduced to them in minds made critical by learning) our commerce with the systems reverts to the informal, to the instinctive human reaction of satisfaction or dislike. We grow as peremptory in our rejection or admission, as when a person presents himself as a candidate for our favor; our verdicts are couched in as simple adjectives of praise or dispraise. We measure the total character of the universe as we feel it, against the flavor of the philosophy proffered us, and one word is enough.

'Statt der lebendigen Natur,' we say, 'da Gott die Menschen schuf hinein,'—that nebulous concoction, that wooden, that straight-laced thing, that crabbed artificiality, that musty schoolroom product, that sick man's dream! Away with it. Away with all of them! Impossible! Impossible!

Our work over the details of his system is indeed what gives us our resultant impression of the philosopher, but it is on the resultant impression itself that we react. Expertness in philosophy is measured by the definiteness of our summarizing reactions, by the immediate perceptive epithet with which the expert hits such complex objects off. But great expertness is not necessary for the epithet to come. Few people have definitely articulated philosophies of their own. But almost every one has his own peculiar sense of a certain total character in the universe, and of the inadequacy fully to match it of the peculiar systems that he knows. They don't just cover *his* world. One will be too dapper, another too pedantic, a third too much of a job-lot of opinions, a fourth too morbid, and a fifth too artificial, or what not. At any rate he and we know off-hand that such philosophies are out of plumb and out of key and out of 'whack,' and have no business to speak up in the universe's name. Plato, Locke, Spinoza, Mill, Caird, Hegel—I prudently avoid names nearer home!—I am sure that to many of you, my hearers, these names are little more than reminders of as many curious personal ways of falling short. It would be an obvious absurdity if such ways of taking the universe were actually true.

We philosophers have to reckon with such feelings on your part. In the last resort, I repeat, it will be by them that all our philosophies shall ultimately be judged. The finally victorious way of looking at things will be the most completely *impressive* way to the normal run of minds.

One word more—namely about philosophies necessarily being abstract outlines. There are outlines and outlines, outlines of buildings that are *fat*, conceived in the cube by their planner, and outlines of buildings invented flat on paper, with the aid of ruler and compass. These remain skinny and emaciated even when set up in stone and mortar, and the outline already suggests that result. An

outline in itself is meagre, truly, but it does not necessarily suggest a meagre thing. It is the essential meagreness of *what is suggested* by the usual rationalistic philosophies that moves empiricists to their gesture of rejection. The case of Herbert Spencer's system is much to the point here. Rationalists feel his fearful array of insufficiencies. His dry schoolmaster temperament, the hurdy-gurdy monotony of him, his preference for cheap makeshifts in argument, his lack of education even in mechanical principles, and in general the vagueness of all his fundamental ideas, his whole system wooden, as if knocked together out of cracked hemlock boards—and yet the half of England wants to bury him in Westminster Abbey.

Why? Why does Spencer call out so much reverence in spite of his weakness in rationalistic eyes? Why should so many educated men who feel that weakness, you and I perhaps, wish to see him in the Abbey notwithstanding? Simply because we feel his heart to be *in the right place* philosophically. His principles may be all skin and bone, but at any rate his books try to mould themselves upon the particular shape of this particular world's carcase. The noise of facts resounds through all his chapters, the citations of fact never cease, he emphasizes facts, turns his face towards their quarter; and that is enough. It means the right *kind* of thing for the empiricist mind.

The pragmatistic philosophy of which I hope to begin talking in my next lecture preserves as cordial a relation with facts, and, unlike Spencer's philosophy, it neither begins nor ends by turning positive religious constructions out of doors—it treats them cordially as well.

I hope I may lead you to find it just the mediating way of thinking that you require.

TWO: *What Pragmatism Means*

WHAT PRAGMATISM MEANS

Some years ago, being with a camping party in the mountains, I returned from a solitary ramble to find every one engaged in a ferocious metaphysical dispute. The *corpus* of the dispute was a squirrel—a live squirrel supposed to be clinging to one side of a tree-trunk; while over against the tree's opposite side a human being was imagined to stand. This human witness tries to get sight of the squirrel by moving rapidly round the tree, but no matter how fast he goes, the squirrel moves as fast in the opposite direction, and always keeps the tree between himself and the man, so that never a glimpse of him is caught. The resultant metaphysical problem now is this: *Does the man go round the squirrel or not?* He goes round the tree, sure enough, and the squirrel is on the tree; but does he go round the squirrel? In the unlimited leisure of the wilderness, discussion had been worn threadbare. Everyone had taken sides, and was obstinate; and the numbers on both sides were even. Each side, when I appeared therefore appealed to me to make it a majority. Mindful of the scholastic adage that whenever you meet a contradiction you must make a distinction, I immediately

sought and found one, as follows: "Which party is right," I said, "depends on what you *practically mean* by 'going round' the squirrel. If you mean passing from the north of him to the east, then to the south, then to the west, and then to the north of him again, obviously the man does go round him, for he occupies these successive positions. But if on the contrary you mean being first in front of him, then on the right of him, then behind him, then on his left, and finally in front again, it is quite as obvious that the man fails to go round him, for by the compensating movements the squirrel makes, he keeps his belly turned towards the man all the time, and his back turned away. Make the distinction, and there is no occasion for any farther dispute. You are both right and both wrong according as you conceive the verb 'to go round' in one practical fashion or the other."

Although one or two of the hotter disputants called my speech a shuffling evasion, saying they wanted no quibbling or scholastic hair-splitting, but meant just plain honest English 'round,' the majority seemed to think that the distinction had assuaged the dispute.

I tell this trivial anecdote because it is a peculiarly simple example of what I wish now to speak of as *the pragmatic method*. The pragmatic method is primarily a method of settling metaphysical disputes that otherwise might be interminable. Is the world one or many?—fated or free?—material or spiritual?—here are notions either of which may or may not hold good of the world; and disputes over such notions are unending. The pragmatic method in such cases is to try to interpret each notion by tracing its respective practical consequences. What difference would it practically make to any one if this notion rather than that notion were true? If no practical difference whatever can be traced, then the alternatives mean practically the same thing, and all dispute is idle. Whenever a dispute is serious, we ought to be able to

show some practical difference that must follow from one side or the other's being right.

A glance at the history of the idea will show you still better what pragmatism means. The term is derived from the same Greek word *πράγμα*, meaning action, from which our words 'practice' and 'practical' come. It was first introduced into philosophy by Mr. Charles Peirce in 1878. In an article entitled 'How to Make Our Ideas Clear,' in the 'Popular Science Monthly' for January of that year¹ Mr. Peirce, after pointing out that our beliefs are really rules for action, said that, to develop a thought's meaning, we need only determine what conduct it is fitted to produce: that conduct is for us its sole significance. And the tangible fact at the root of all our thought-distinctions, however subtle, is that there is no one of them so fine as to consist in anything but a possible difference of practice. To attain perfect clearness in our thoughts of an object, then, we need only consider what conceivable effects of a practical kind the object may involve—what sensations we are to expect from it, and what reactions we must prepare. Our conception of these effects, whether immediate or remote, is then for us the whole of our conception of the object, so far as that conception has positive significance at all.

This is the principle of Peirce, the principle of pragmatism. It lay entirely unnoticed by any one for twenty years, until I, in an address before Professor Howison's philosophical union at the University of California, brought it forward again and made a special application of it to religion. By that date (1898) the times seemed ripe for its reception. The word 'pragmatism' spread, and at present it fairly spots the pages of the philosophic journals. On all hands we find the 'pragmatic movement' spoken of, sometimes with respect, sometimes with contumely, seldom with clear understanding. It is evident that the term applies itself conveniently to a number of

tendencies that hitherto have lacked a collective name, and that it has 'come to stay.'

To take in the importance of Peirce's principle, one must get accustomed to applying it to concrete cases. I found a few years ago that Ostwald, the illustrious Leipzig chemist, had been making perfectly distinct use of the principle of pragmatism in his lectures on the philosophy of science, though he had not called it by that name.

"All realities influence our practice," he wrote me, "and that influence is their meaning for us. I am accustomed to put questions to my classes in this way: In what respects would the world be different if this alternative or that were true? If I can find nothing that would become different, then the alternative has no sense."

That is, the rival views mean practically the same thing, and meaning, other than practical, there is for us none. Ostwald in a published lecture gives this example of what he means. Chemists have long wrangled over the inner constitution of certain bodies called 'tautomers.' Their properties seemed equally consistent with the notion that an instable hydrogen atom oscillates inside of them, or that they are instable mixtures of two bodies. Controversy raged, but never was decided. "It would never have begun," says Ostwald, "if the combatants had asked themselves what particular experimental fact could have been made different by one or the other view being correct. For it would then have appeared that no difference of fact could possibly ensue; and the quarrel was as unreal as if, theorizing in primitive times about the raising of dough by yeast, one party should have invoked a 'brownie,' while another insisted on an 'elf' as the true cause of the phenomenon."²

It is astonishing to see how many philosophical disputes collapse into insignificance the moment you subject them to this simple test of tracing a concrete consequence.

There can *be* no difference anywhere that doesn't *make* a difference elsewhere—no difference in abstract truth that doesn't express itself in a difference in concrete fact and in conduct consequent upon that fact, imposed on somebody, somehow, somewhere, and somewhen. The whole function of philosophy ought to be to find out what definite difference it will make to you and me, at definite instants of our life, if this world-formula or that world-formula be the true one.

There is absolutely nothing new in the pragmatic method. Socrates was an adept at it. Aristotle used it methodically. Locke, Berkeley, and Hume made momentous contributions to truth by its means. Shadworth Hodgson keeps insisting that realities are only what they are 'known as.' But these forerunners of pragmatism used it in fragments: they were preluders only. Not until in our time has it generalized itself, become conscious of a universal mission, pretended to a conquering destiny. I believe in that destiny, and I hope I may end by inspiring you with my belief.

Pragmatism represents a perfectly familiar attitude in philosophy, the empiricist attitude, but it represents it, as it seems to me, both in a more radical and in a less objectionable form than it has ever yet assumed. A pragmatist turns his back resolutely and once for all upon a lot of inveterate habits dear to professional philosophers. He turns away from abstraction and insufficiency, from verbal solutions, from bad *a priori* reasons, from fixed principles, closed systems, and pretended absolutes and origins. He turns towards concreteness and adequacy, towards facts, towards action and towards power. That means the empiricist temper regnant and the rationalist temper sincerely given up. It means the open air and possibilities of nature, as against dogma, artificiality, and the pretence of finality in truth.

At the same time it does not stand for any special

results. It is a method only. But the general triumph of that method would mean an enormous change in what I called in my last lecture the 'temperament' of philosophy. Teachers of the ultra-rationalistic type would be frozen out, much as the courtier type is frozen out in republics, as the ultramontane type of priest is frozen out in protestant lands. Science and metaphysics would come much nearer together, would in fact work absolutely hand in hand.

Metaphysics has usually followed a very primitive kind of quest. You know how men have always hankered after unlawful magic, and you know what a great part in magic *words* have always played. If you have his name, or the formula of incantation that binds him, you can control the spirit, genie, afrite, or whatever the power may be. Solomon knew the names of all the spirits, and having their names, he held them subject to his will. So the universe has always appeared to the natural mind as a kind of enigma, of which the key must be sought in the shape of some illuminating or power-bringing word or name. That word names the universe's *principle*, and to possess it is after a fashion to possess the universe itself. 'God,' 'Matter,' 'Reason,' 'the Absolute,' 'Energy,' are so many solving names. You can rest when you have them. You are at the end of your metaphysical quest.

But if you follow the pragmatic method, you cannot look on any such word as closing your quest. You must bring out of each word its practical cash-value, set it at work within the stream of your experience. It appears less as a solution, then, than as a program for more work, and more particularly as an indication of the ways in which existing realities may be *changed*.

Theories thus become instruments, not answers to enigmas, in which we can rest. We don't lie back upon them, we move forward, and, on occasion, make nature over again by their aid. Pragmatism unstiffens all our theories,

limbers them up and sets each one at work. Being nothing essentially new, it harmonizes with many ancient philosophic tendencies. It agrees with nominalism for instance, in always appealing to particulars; with utilitarianism in emphasizing practical aspects; with positivism in its disdain for verbal solutions, useless questions and metaphysical abstractions.

All these, you see, are *anti-intellectualist* tendencies. Against rationalism as a pretension and a method pragmatism is fully armed and militant. But, at the outset, at least, it stands for no particular results. It has no dogmas, and no doctrines save its method. As the young Italian pragmatist Papini has well said, it lies in the midst of our theories, like a corridor in a hotel. Innumerable chambers open out of it. In one you may find a man writing an atheistic volume; in the next some one on his knees praying for faith and strength; in a third a chemist investigating a body's properties. In a fourth a system of idealistic metaphysics is being excogitated; in a fifth the impossibility of metaphysics is being shown. But they all own the corridor, and all must pass through it if they want a practicable way of getting into or out of their respective rooms.

No particular results then, so far, but only an attitude of orientation, is what the pragmatic method means. *The attitude of looking away from first things, principles, 'categories,' supposed necessities; and of looking towards last things, fruits, consequences, facts.*

So much for the pragmatic method! You may say that I have been praising it rather than explaining it to you, but I shall presently explain it abundantly enough by showing how it works on some familiar problems. Meanwhile the word pragmatism has come to be used in a still wider sense, as meaning also a certain *theory of truth*. I mean to give a whole lecture to the statement of that theory, after first paving the way, so I can be

marize old facts and to lead to new ones. They are only a man-made language, a conceptual shorthand, as some one calls them, in which we write our reports of nature; and languages, as is well known, tolerate much choice of expression and many dialects.

Thus human arbitrariness has driven divine necessity from scientific logic. If I mention the names of Sigwart, Mach, Ostwald, Pearson, Milhaud, Poincaré, Duhem, Ruyssen, those of you who are students will easily identify the tendency I speak of, and will think of additional names.

Riding now on the front of this wave of scientific logic Messrs. Schiller and Dewey appear with their pragmatic account of what truth everywhere signifies. Everywhere, these teachers say, 'truth' in our ideas and beliefs means the same thing that it means in science. It means, they say, nothing but this, *that ideas (which themselves are but parts of our experience) become true just in so far as they help us to get into satisfactory relations with other parts of our experience*, to summarize them and get about among them by conceptual short-cuts instead of following the interminable succession of particular phenomena. Any idea upon which we can ride, so to speak; any idea that will carry us prosperously from any one part of our experience to any other part, linking things satisfactorily, working securely, simplifying, saving labor; is true for just so much, true in so far forth, true *instrumentally*. This is the 'instrumental' view of truth taught so successfully at Chicago, the view that truth in our ideas means their power to 'work,' promulgated so brilliantly at Oxford.

Messrs. Dewey, Schiller and their allies, in reaching this general conception of all truth, have only followed the example of geologists, biologists and philologists. In the establishment of these other sciences, the successful stroke was always to take some simple process actually

observable in operation—as denudation by weather, say, or variation from parental type, or change of dialect by incorporation of new words and pronunciations—and then to generalize it, making it apply to all times, and produce great results by summing its effects through the ages.

The observable process which Schiller and Dewey particularly singled out for generalization is the familiar one by which any individual settles into *new opinions*. The process here is always the same. The individual has a stock of old opinions already, but he meets a new experience that puts them to a strain. Somebody contradicts them; or in a reflective moment he discovers that they contradict each other; or he hears of facts with which they are incompatible; or desires arise in him which they cease to satisfy. The result is an inward trouble to which his mind till then had been a stranger, and from which he seeks to escape by modifying his previous mass of opinions. He saves as much of it as he can, for in this matter of belief we are all extreme conservatives. So he tries to change first this opinion, and then that (for they resist change very variously), until at last some new idea comes up which he can graft upon the ancient stock with a minimum of disturbance of the latter, some idea that mediates between the stock and the new experience and runs them into one another most felicitously and expediently.

This new idea is then adopted as the true one. It preserves the older stock of truths with a minimum of modification, stretching them just enough to make them admit the novelty, but conceiving that in ways as familiar as the case leaves possible. An *outrée* explanation, violating all our preconceptions, would never pass for a true account of a novelty. We should scratch round industriously till we found something less eccentric. The most violent revolutions in an individual's beliefs leave most of

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his old order standing. Time and space, cause and effect, nature and history, and one's own biography remain untouched. New truth is always a go-between, a smoother-over of transitions. It marries old opinion to new fact so as ever to show a minimum of jolt, a maximum of continuity. We hold a theory true just in proportion to its success in solving this 'problem of maxima and minima.' But success in solving this problem is eminently a matter of approximation. We say this theory solves it on the whole more satisfactorily than that theory; but that means more satisfactorily to ourselves, and individuals will emphasize their points of satisfaction differently. To a certain degree, therefore, everything here is plastic.

The point I now urge you to observe particularly is the part played by the older truths. Failure to take account of it is the source of much of the unjust criticism levelled against pragmatism. Their influence is absolutely controlling. Loyalty to them is the first principle—in most cases it is the only principle; for by far the most usual way of handling phenomena so novel that they would make for a serious re-arrangement of our preconception is to ignore them altogether, or to abuse those who bear witness for them.

You doubtless wish examples of this process of truth's growth, and the only trouble is their superabundance. The simplest case of new truth is of course the mere numerical addition of new kinds of facts, or of new single facts of old kinds, to our experience—an addition that involves no alteration in the old beliefs. Day follows day, and its contents are simply added. The new contents themselves are not true, they simply *come* and *are*. Truth is *what we say about* them, and when we say that they have come, truth is satisfied by the plain additive formula.

But often the day's contents oblige a re-arrangement. If I should now utter piercing shrieks and act like a

maniac on this platform, it would make many of you revise your ideas as to the probable worth of my philosophy. 'Radium' came the other day as part of the day's content, and seemed for a moment to contradict our ideas of the whole order of nature, that order having come to be identified with what is called the conservation of energy. The mere sight of radium paying heat away indefinitely out of its own pocket seemed to violate that conservation. What to think? If the radiations from it were nothing but an escape of unsuspected 'potential' energy, pre-existent inside of the atoms, the principle of conservation would be saved. The discovery of 'helium' as the radiation's outcome, opened a way to this belief. So Ramsay's view is generally held to be true, because, although it extends our old ideas of energy, it causes a minimum of alteration in their nature.

I need not multiply instances. A new opinion counts as 'true' just in proportion as it gratifies the individual's desire to assimilate the novel in his experience to his beliefs in stock. It must both lean on old truth and grasp new fact; and its success (as I said a moment ago) in doing this, is a matter for the individual's appreciation. When old truth grows, then, by new truth's addition, it is for subjective reasons. We are in the process and obey the reasons. That new idea is truest which performs most felicitously its function of satisfying our double urgency. It makes itself true, gets itself classed as true, by the way it works; grafting itself then upon the ancient body of truth, which thus grows much as a tree grows by the activity of a new layer of cambium.

Now Dewey and Schiller proceed to generalize this observation and to apply it to the most ancient parts of truth. They also once were plastic. They also were called true for human reasons. They also mediated between still earlier truths and what in those days were novel observations. Purely objective truth, truth in whose establishment

the function of giving human satisfaction in marrying previous parts of experience with newer parts played no rôle whatever, is nowhere to be found. The reasons why we call things true is the reason why they *are* true, for 'to be true' *means* only to perform this marriage-function.

The trail of the human serpent is thus over everything. Truth independent; truth that we *find* merely; truth no longer malleable to human need; truth incorrigible, in a word; such truth exists indeed superabundantly—or is supposed to exist by rationalistically minded thinkers; but then it means only the dead heart of the living tree, and its being there means only that truth also has its paleontology, and its 'prescription,' and may grow stiff with years of veteran service and petrified in men's regard by sheer antiquity. But how plastic even the oldest truths nevertheless really are has been vividly shown in our day by the transformation of logical and mathematical ideas, a transformation which seems even to be invading physics. The ancient formulas are reinterpreted as special expressions of much wider principles, principles that our ancestors never got a glimpse of in their present shape and formulation.

Mr. Schiller still gives to all this view of truth the name of 'Humanism,' but, for this doctrine too, the name of pragmatism seems fairly to be in the ascendent, so I will treat it under the name of pragmatism in these lectures.

Such then would be the scope of pragmatism—first, a method; and second, a genetic theory of what is meant by truth. And these two things must be our future topics.

What I have said of the theory of truth will, I am sure, have appeared obscure and unsatisfactory to most of you by reason of its brevity. I shall make amends for that hereafter. In a lecture on 'common sense' I shall try to show what I mean by truths grown petrified by antiquity. In another lecture I shall expatiate on the idea

that our thoughts become true in proportion as they successfully exert their go-between function. In a third I shall show how hard it is to discriminate subjective from objective factors in Truth's development. You may not follow me wholly in these lectures; and if you do, you may not wholly agree with me. But you will, I know, regard me at least as serious, and treat my effort with respectful consideration.

You will probably be surprised to learn, then, that Messrs. Schiller's and Dewey's theories have suffered a hailstorm of contempt and ridicule. All rationalism has risen against them. In influential quarters Mr. Schiller, in particular, has been treated like an impudent schoolboy who deserves a spanking. I should not mention this, but for the fact that it throws so much sidelight upon that rationalistic temper to which I have opposed the temper of pragmatism. Pragmatism is uncomfortable away from facts. Rationalism is comfortable only in the presence of abstractions. This pragmatist talk about truths in the plural, about their utility and satisfactoriness, about the success with which they 'work,' etc., suggests to the typical intellectualist mind a sort of coarse lame second-rate makeshift article of truth. Such truths are not real truth. Such tests are merely subjective. Against this, objective truth must be something non-utilitarian, haughty, refined, remote, august, exalted. It must be an absolute correspondence of our thoughts with an equally absolute reality. It must be what we *ought* to think unconditionally. The conditioned ways in which we *do* think are so much irrelevance and matter for psychology. Down with psychology, up with logic, in all this question!

See the exquisite contrast of the types of mind! The pragmatist clings to facts and concreteness, observes truth at its work in particular cases, and generalizes. Truth, for him, becomes a class-name for all sorts of definite working-values in experience. For the rational-

ist it remains a pure abstraction, to the bare name of which we must defer. When the pragmatist undertakes to show in detail just *why* we must defer, the rationalist is unable to recognize the concretes from which his own abstraction is taken. He accuses us of *denying* truth; whereas we have only sought to trace exactly why people follow it and always ought to follow it. Your typical ultra-abstractionist fairly shudders at concreteness: other things equal, he positively prefers the pale and spectral. If the two universes were offered, he would always choose the skinny outline rather than the rich thicket of reality. It is so much purer, clearer, nobler.

I hope that as these lectures go on, the concreteness and closeness to facts of the pragmatism which they advocate may be what approves itself to you as its most satisfactory peculiarity. It only follows here the example of the sister-sciences, interpreting the unobserved by the observed. It brings old and new harmoniously together. It converts the absolutely empty notion of a static relation of 'correspondence' (what that may mean we must ask later) between our minds and reality, into that of a rich and active commerce (that any one may follow in detail and understand) between particular thoughts of ours, and the great universe of other experiences in which they play their parts and have their uses.

But enough of this at present? The justification of what I say must be postponed. I wish now to add a word in further explanation of the claim I made at our last meeting, that pragmatism may be a happy harmonizer of empiricist ways of thinking with the more religious demands of human beings.

Men who are strongly of the fact-loving temperament, you may remember me to have said, are liable to be kept at a distance by the small sympathy with facts which that philosophy from the present-day fashion of

idealism offers them. It is far too intellectualistic. Old fashioned theism was bad enough, with its notion of God as an exalted monarch, made up of a lot of unintelligible or preposterous 'attributes'; but, so long as it held strongly by the argument from design, it kept some touch with concrete realities. Since, however, darwinism has once for all displaced design from the minds of the 'scientific,' theism has lost that foothold; and some kind of an immanent or pantheistic deity working in things rather than above them is, if any, the kind recommended to our contemporary imagination. Aspirants to a philosophic religion turn, as a rule, more hopefully nowadays towards idealistic pantheism than towards the older dualistic theism, in spite of the fact that the latter still counts able defenders.

But, as I said in my first lecture, the brand of pantheism offered is hard for them to assimilate if they are lovers of facts, or empirically minded. It is the absolutistic brand, spurning the dust and reared upon pure logic. It keeps no connexion whatever with concreteness. Affirming the Absolute Mind, which is its substitute for God, to be the rational presupposition of all particulars of fact, whatever they may be, it remains supremely indifferent to what the particular facts in our world actually are. Be they what they may, the Absolute will father them. Like the sick lion in Esop's fable, all footprints lead into his den, but *nulla vestigia retrorsum*. You cannot redescend into the world of particulars by the Absolute's aid, or deduce any necessary consequences of detail important for your life from your idea of his nature. He gives you indeed the assurance that all is well with *Him*, and for his eternal way of thinking; but thereupon he leaves you to be finitely saved by your own temporal devices.

Far be it from me to deny the majesty of this conception, or its capacity to yield religious comfort to a

most respectable class of minds. But from the human point of view, no one can pretend that it doesn't suffer from the faults of remoteness and abstractness. It is eminently a product of what I have ventured to call the rationalistic temper. It disdains empiricism's needs. It substitutes a pallid outline for the real world's richness. It is dapper, it is noble in the bad sense, in the sense in which to be noble is to be inapt for humble service. In this real world of sweat and dirt, it seems to me that when a view of things is 'noble,' that ought to count as a presumption against its truth, and as a philosophic disqualification. The prince of darkness may be a gentleman, as we are told he is, but whatever the God of earth and heaven is, he can surely be no gentleman. His menial services are needed in the dust of our human trails, even more than his dignity is needed in the empyrean.

Now pragmatism, devoted though she be to facts, has no such materialistic bias as ordinary empiricism labors under. Moreover, she has no objection whatever to the realizing of abstractions, so long as you get about among particulars with their aid and they actually carry you somewhere. Interested in no conclusions but those which our minds and our experiences work out together, she has no *a priori* prejudices against theology. *If theological ideas prove to have a value for concrete life, they will be true, for pragmatism, in the sense of being good for so much. For how much more they are true, will depend entirely on their relations to the other truths that also have to be acknowledged.*

What I said just now about the Absolute, of transcendental idealism, is a case in point. First, I called it majestic and said it yielded religious comfort to a class of minds, and then I accused it of remoteness and sterility. But so far as it affords such comfort, it surely is not sterile; it has that amount of value; it performs a concrete function. As a good pragmatist, I myself ought to call

the Absolute true 'in so far forth,' then; and I unhesitatingly now do so.

But what does *true in so far forth* mean in this case? To answer, we need only apply the pragmatic method. What do believers in the Absolute mean by saying that their belief affords them comfort? They mean that since, in the Absolute finite evil is 'overruled' already, we may, therefore, whenever we wish, treat the temporal as if it were potentially the eternal, be sure that we can trust its outcome, and, without sin, dismiss our fear and drop the worry of our finite responsibility. In short, they mean that we have a right ever and anon to take a moral holiday, to let the world wag in its own way, feeling that its issues are in better hands than ours and are none of our business.

The universe is a system of which the individual members may relax their anxieties occasionally, in which the don't-care mood is also right for men, and moral holidays in order,—that, if I mistake not, is part, at least, of what the Absolute is 'known-as,' that is the great difference in our particular experiences which his being true makes, for us, that is his cash-value when he is pragmatically interpreted. Farther than that the ordinary lay-reader in philosophy who thinks favorably of absolute idealism does not venture to sharpen his conceptions. He can use the Absolute for so much, and so much is very precious. He is pained at hearing you speak incredulously of the Absolute, therefore, and disregards your criticisms because they deal with aspects of the conception that he fails to follow.

If the Absolute means this, and means no more than this, who can possibly deny the truth of it? To deny it would be to insist that men should never relax, and that holidays are never in order.

I am well aware how odd it must seem to some of you to hear me say that an idea is 'true' so long as to

believe it is profitable to our lives. That it is *good*, for as much as it profits, you will gladly admit. If what we do by its aid is good, you will allow the idea itself to be good in so far forth, for we are the better for possessing it. But is it not a strange misuse of the word 'truth,' you will say, to call ideas also 'true' for this reason?

To answer this difficulty fully is impossible at this stage of my account. You touch here upon the very central point of Messrs. Schiller's, Dewey's and my own doctrine of truth, which I can not discuss with detail until my sixth lecture. Let me now say only this, that truth is *one species of good*, and not, as is usually supposed, a category distinct from good, and co-ordinate with it. *The true is the name of whatever proves itself to be good in the way of belief, and good, too, for definite, assignable reasons.* Surely you must admit this, that if there were *no* good for life in true ideas, or if the knowledge of them were positively disadvantageous and false ideas the only useful ones, then the current notion that truth is divine and precious, and its pursuit a duty, could never have grown up or become a dogma. In a world like that, our duty would be to *shun* truth, rather. But in this world, just as certain foods are not only agreeable to our taste, but good for our teeth, our stomach, and our tissues; so certain ideas are not only agreeable to think about, or agreeable as supporting other ideas that we are fond of, but they are also helpful in life's practical struggles. If there be any life that it is really better we should lead, and if there be any idea which, if believed in, would help us to lead that life, then it would be really *better for us* to believe in that idea, *unless, indeed, belief in it incidentally clashed with other greater vital benefits.*

'What would be better for us to believe!' This sounds very like a definition of truth. It comes very near to saying 'what we *ought* to believe': and in *that* definition

none of you would find any oddity. Ought we ever not to believe what it is *better for us* to believe? And can we then keep the notion of what is better for us, and what is true for us, permanently apart?

Pragmatism says no, and I fully agree with her. Probably you also agree, so far as the abstract statement goes, but with a suspicion that if we practically did believe everything that made for good in our own personal lives, we should be found indulging all kinds of fancies about this world's affairs, and all kinds of sentimental superstitions about a world hereafter. Your suspicion here is undoubtedly well founded, and it is evident that something happens when you pass from the abstract to the concrete that complicates the situation.

I said just now that what is better for us to believe is true *unless the belief incidentally clashes with some other vital benefit*. Now in real life what vital benefits is any particular belief of ours most liable to clash with? What indeed except the vital benefits yielded by *other beliefs* when these prove incompatible with the first ones? In other words, the greatest enemy of any one of our truths may be the rest of our truths. Truths have once for all this desperate instinct of self-preservation and of desire to extinguish whatever contradicts them. My belief in the Absolute, based on the good it does me, must run the gauntlet of all my other beliefs. Grant that it may be true in giving me a moral holiday. Nevertheless, as I conceive it,—and let me speak now confidentially, as it were, and merely in my own private person,—it clashes with other truths of mine whose benefits I hate to give up on its account. It happens to be associated with a kind of logic of which I am the enemy, I find that it entangles me in metaphysical paradoxes that are unacceptable, etc., etc. But as I have enough trouble in life already without adding the trouble of carrying these intellectual inconsistencies, I personally just give up the

Absolute. I just *take* my moral holidays; or else as a professional philosopher, I try to justify them by some other principle.

If I could restrict my notion of the Absolute to its bare holiday-giving value, it wouldn't clash with any other truths. But we can not easily thus restrict our hypotheses. They carry supernumerary features, and these it is that clash so. My disbelief in the Absolute means then disbelief in those other supernumerary features, for I fully believe in the legitimacy of taking moral holidays.

You see by this what I meant when I called pragmatism a mediator and reconciler and said, borrowing the word from Papini, that she 'unstiffens' our theories. She has in fact no prejudices whatever, no obstructive dogmas, no rigid canons of what shall count as proof. She is completely genial. She will entertain any hypothesis, she will consider any evidence. It follows that in the religious field she is at a great advantage both over positivistic empiricism, with its anti-theological bias, and over religious rationalism, with its exclusive interest in the remote, the noble, the simple, and the abstract in the way of conception.

In short, she widens the field of search for God. Rationalism sticks to logic and the empyrean. Empiricism sticks to the external senses. Pragmatism is willing to take anything, to follow either logic or the senses and to count the humblest and most personal experiences. She will count mystical experiences if they have practical consequences. She will take a God who lives in the very dirt of private fact—if that should seem a likely place to find him.

Her only test of probable truth is what works best in the way of leading us, what fits every part of life best and combines with the collectivity of experience's demands, nothing being omitted. If theological ideas should do this, if the notion of God, in particular, should prove

to do it, how could pragmatism possibly deny God's existence? She could see no meaning in treating as 'not true' a notion that was pragmatically so successful. What other kind of truth could there be, for her, than all this agreement with concrete reality?

In my last lecture I shall return again to the relations of pragmatism with religion. But you see already how democratic she is. Her manners are as various and flexible, her resources as rich and endless, and her conclusions as friendly as those of mother nature.

THREE: *Some Metaphysical Problems
Pragmatically Considered*

SOME METAPHYSICAL PROBLEMS
PRAGMATICALLY CONSIDERED

I am now to make the pragmatic method more familiar by giving you some illustrations of its application to particular problems. I will begin with what is driest, and the first thing I shall take will be the problem of *Substance*. Every one uses the old distinction between substance and attribute, enshrined as it is in the very structure of human language, in the difference between grammatical subject and predicate. Here is a bit of black-board crayon. Its modes, attributes, properties, accidents, or affections,—use which term you will,—are whiteness, friability, cylindrical shape, insolubility in water, etc., etc. But the bearer of these attributes is so much *chalk*, which thereupon is called the substance in which they inhere. So the attributes of this desk inhere in the substance 'wood,' those of my coat in the substance 'wool,' and so forth. Chalk, wood and wool, show again, in spite of their differences, common properties, and in so far forth they are themselves counted as modes of a still more primal substance, *matter*, the attributes of which are space-occupancy and impenetrability. Similarly our thoughts and feelings are affections or properties of our several

souls, which are substances, but again not wholly in their own right, for they are modes of the still deeper substance 'spirit.'

Now it was very early seen that all *we know* of the chalk is the whiteness, friability, etc., all *we know* of the wood is the combustibility and fibrous structure. A group of attributes is what each substance here is known-as, they form its sole cash-value for our actual experience. The substance is in every case revealed through *them*; if we were cut off from *them* we should never suspect its existence; and if God should keep sending them to us in an unchanged order, miraculously annihilating at a certain moment the substance that supported them, we never could detect the moment, for our experiences themselves would be unaltered. Nominalists accordingly adopt the opinion that substance is a spurious idea due to our inveterate human trick of turning names into things. Phenomena come in groups—the chalk-group, the wood-group, etc.,—and each group gets its name. The name we then treat as in a way supporting the group of phenomena. The low thermometer to-day, for instance, is supposed to come from something called the 'climate.' Climate is really only the name for a certain group of days, but it is treated as if it lay *behind* the day, and in general we place the name, as if it were a being, behind the facts it is the name of. But the phenomenal properties of things, nominalists say, surely do not really inhere in names, and if not in names then they do not inhere in anything. They *adhere*, or *cohere*, rather, *with each other*, and the notion of a substance inaccessible to us, which we think accounts for such cohesion by supporting it, as cement might support pieces of mosaic, must be abandoned. The fact of the bare cohesion itself is all that the notion of the substance signifies. Behind that fact is nothing.

Scholasticism has taken the notion of substance from

common sense and made it very technical and articulate. Few things would seem to have fewer pragmatic consequences for us than substances, cut off as we are from every contact with them. Yet in one case scholasticism has proved the importance of the substance-idea by treating it pragmatically. I refer to certain disputes about the mystery of the Eucharist. Substance here would appear to have momentous pragmatic value. Since the accidents of the wafer don't change in the Lord's supper, and yet it has become the very body of Christ, it must be that the change is in the substance solely. The bread-substance must have been withdrawn, and the divine substance substituted miraculously without altering the immediate sensible properties. But tho these don't alter, a tremendous difference has been made, no less a one than this, that we who take the sacrament, now feed upon the very substance of divinity. The substance-notion breaks into life, then, with tremendous effect, if once you allow that substances can separate from their accidents, and exchange these latter.

This is the only pragmatic application of the substance-idea with which I am acquainted; and it is obvious that it will only be treated seriously by those who already believe in the 'real presence' on independent grounds.

Material substance was criticised by Berkeley with such telling effect that his name has reverberated through all subsequent philosophy. Berkeley's treatment of the notion of matter is so well known as to need hardly more than a mention. So far from denying the external world which we know, Berkeley corroborated it. It was the scholastic notion of a material substance unapproachable by us, *behind* the external world, deeper and more real than it, and needed to support it, which Berkeley maintained to be the most effective of all reducers of the external world to unreality. Abolish

that substance, he said, believe that God, whom you can understand and approach, sends you the sensible world directly, and you confirm the latter and back it up by his divine authority. Berkeley's criticism of 'matter' was consequently absolutely pragmatistic. Matter is known as our sensations of colour, figure, hardness and the like. They are the cash-value of the term. The difference matter makes to us by truly being is that we then get such sensations; by not being, is that we lack them. These sensations then are its sole meaning. Berkeley doesn't deny matter, then; he simply tells us what it consists of. It is a true name for just so much in the way of sensations.

Locke, and later Hume, applied a similar pragmatic criticism to the notion of *spiritual substance*. I will only mention Locke's treatment of our 'personal identity.' He immediately reduces this notion to its pragmatic value in terms of experience. It means, he says, so much 'consciousness,' namely the fact that at one moment of life we remember other moments, and feel them all as parts of one and the same personal history. Rationalism had explained this practical continuity in our life by the unity of our soul-substance. But Locke says: suppose that God should take away the consciousness, should *we* be any the better for having still the soul-principle? Suppose he annexed the same consciousness to different souls, should *we*, as we realize *ourselves*, be any the worse for that fact? In Locke's day the soul was chiefly a thing to be rewarded or punished. See how Locke, discussing it from this point of view, keeps the question pragmatic:

"Suppose," he says, "one to think himself to be the same *soul* that once was Nestor or Thersites. Can he think their actions his own any more than the actions of any other man that ever existed? But let him once find himself *conscious* of any of the actions of Nestor, he then finds himself the same person with Nestor . . . In this

personal identity is founded all the right and justice of reward and punishment. It may be reasonable to think, no one shall be made to answer for what he knows nothing of, but shall receive his doom, his consciousness accusing or excusing. Supposing a man punished now for what he had done in another life, whereof he could be made to have no consciousness at all, what difference is there between that punishment and being created miserable?"

Our personal identity, then, consists, for Locke, solely in pragmatically definable particulars. Whether, apart from these verifiable facts, it also inheres in a spiritual principle, is a merely curious speculation. Locke, compromiser that he was, passively tolerated the belief in a substantial soul behind our consciousness. But his successor Hume, and most empirical psychologists after him, have denied the soul, save as the name for verifiable cohesions in our inner life. They redescend into the stream of experience with it, and cash it into so much small-change value in the way of 'ideas' and their peculiar connexions with each other. As I said of Berkeley's matter, the soul is good or 'true' for just *so much*, but no more.

The mention of material substance naturally suggests the doctrine of 'materialism,' but philosophical materialism is not necessarily knit up with belief in 'matter,' as a metaphysical principle. One may deny matter in that sense, as strongly as Berkeley did, one may be a phenomenalist like Huxley, and yet one may still be a materialist in the wider sense, of explaining higher phenomena by lower ones, and leaving the destinies of the world at the mercy of its blinder parts and forces. It is in this wider sense of the word that materialism is opposed to spiritualism or theism. The laws of physical nature are what run things, materialism says. The highest productions of human genius might be ciphered by one who

had complete acquaintance with the facts, out of their physiological conditions, regardless whether nature be there only for our minds, as idealists contend, or not. Our minds in any case would have to record the kind of nature it is, and write it down as operating through blind laws of physics. This is the complexion of present day materialism, which may better be called naturalism. Over against it stands 'theism,' or what in a wide sense may be termed 'spiritualism.' Spiritualism says that mind not only witnesses and records things, but also runs and operates them: the world being thus guided, not by its lower, but by its higher element.

Treated as it often is, this question becomes little more than a conflict between aesthetic preferences. Matter is gross, coarse, crass, muddy; spirit is pure, elevated, noble; and since it is more consonant with the dignity of the universe to give the primacy in it to what appears superior, spirit must be affirmed as the ruling principle. To treat abstract principles as finalities, before which our intellects may come to rest in a state of admiring contemplation, is the great rationalist failing. Spiritualism, as often held, may be simply a state of admiration for one kind, and of dislike for another kind, of abstraction. I remember a worthy spiritualist professor who always referred to materialism as the 'mud-philosophy,' and deemed it thereby refuted.

To such spiritualism as this there is an easy answer, and Mr. Spencer makes it effectively. In some well-written pages at the end of the first volume of his *Psychology* he shows us that a 'matter' so infinitely subtle, and performing motions as inconceivably quick and fine as those which modern science postulates in her explanations, has no trace of grossness left. He shows that the conception of spirit, as we mortals hitherto have framed it, is itself too gross to cover the exquisite tenuity of nature's facts. Both terms, he says, are but symbols, point-

ing to that one unknowable reality in which their oppositions cease.

To an abstract objection an abstract rejoinder suffices; and so far as one's opposition to materialism springs from one's disdain of matter as something 'crass,' Mr. Spencer cuts the ground from under one. Matter is indeed infinitely and incredibly refined. To any one who has ever looked on the face of a dead child or parent the mere fact that matter *could* have taken for a time that precious form, ought to make matter sacred ever after. It makes no difference what the *principle* of life may be, material or immaterial, matter at any rate co-operates, lends itself to all life's purposes. That beloved incarnation was among matter's possibilities.

But now, instead of resting in principles, after this stagnant intellectualist fashion, let us apply the pragmatic method to the question. What do we *mean* by matter? What practical difference can it make *now* that the world should be run by matter or by spirit? I think we find that the problem takes with this a rather different character.

And first of all I call your attention to a curious fact. It makes not a single jot of difference so far as the *past* of the world goes, whether we deem it to have been the work of matter or whether we think a divine spirit was its author.

Imagine, in fact, the entire contents of the world to be once for all irrevocably given. Imagine it to end this very moment, and to have no future; and then let a theist and a materialist apply their rival explanations to its history. The theist shows how a God made it; the materialist shows, and we will suppose with equal success, how it resulted from blind physical forces. Then let the pragmatist be asked to choose between their theories. How can he apply his test if a world is already completed? Concepts for him are things to come back into

experience with, things to make us look for differences. But by hypothesis there is to be no more experience and no possible differences can now be looked for. Both theories have shown all their consequences and, by the hypothesis we are adopting, these are identical. The pragmatist must consequently say that the two theories, in spite of their different-sounding names, mean exactly the same thing, and that the dispute is purely verbal. [I am supposing, of course, that the theories *have* been equally successful in their explanations of what is.]

For just consider the case sincerely, and say what would be the *worth* of a God if he *were* there, with his work accomplished and his world run down. He would be worth no more than just that world was worth. To that amount of result, with its mixed merits and defects, his creative power could attain but go no farther. And since there is to be no future; since the whole value and meaning of the world has been already paid in and actualized in the feelings that went with it in the passing, and now go with it in the ending; since it draws no supplemental significance (such as our real world draws) from its function of preparing something yet to come; why then, by it we take God's measure, as it were. He is the Being who could once for all do *that*; and for that much we are thankful to him, but for nothing more. But now, on the contrary hypothesis, namely, that the bits of matter following their laws could make that world and do no less, should we not be just as thankful to them? Wherein should we suffer loss, then, if we dropped God as an hypothesis and made the matter alone responsible? Where would any special deadness, or crassness, come in? And how, experience being what is once for all, would God's presence in it make it any more living or richer?

Candidly, it is impossible to give any answer to this question. The actually experienced world is supposed to

be the same in its details on either hypothesis, 'the same, for our praise or blame,' as Browning says. It stands there indefeasibly: a gift which can't be taken back. Calling matter the cause of it retracts no single one of the items that have made it up, nor does calling God the cause augment them. They are the God or the atoms, respectively, of just that and no other world. The God, if there, has been doing just what atoms could do—appearing in the character of atoms, so to speak—and earning such gratitude as is due to atoms, and no more. If his presence lends no different turn or issue to the performance, it surely can lend it no increase of dignity. Nor would indignity come to it were he absent, and did the atoms remain only actors on the stage. When a play is once over, and the curtain down, you really make it no better by claiming an illustrious genius for its author, just as you make it no worse by calling him a common hack.

Thus if no future detail of experience or conduct is to be deduced from our hypothesis, the debate between materialism and theism becomes quite idle and insignificant. Matter and God in that event mean exactly the same thing—the power, namely, neither more nor less, that could make just this completed world—and the wise man is he who in such a case would turn his back on such a supererogatory discussion. Accordingly, most men instinctively, and positivists and scientists deliberately, do turn their backs on philosophical disputes from which nothing in the line of definite future consequences can be seen to follow. The verbal and empty character of philosophy is surely a reproach with which we are but too familiar. If pragmatism be true, it is a perfectly sound reproach unless the theories under fire can be shown to have alternative practical outcomes, however delicate and distant these may be. The common man and the scientist say they discover no such outcomes, and if

the metaphysician can discern none either, the others certainly are in the right of it, as against him. His science is then but pompous trifling; and the endowment of a professorship for such a being would be silly.

Accordingly, in every genuine metaphysical debate some practical issue, however conjectural and remote, is involved. To realize this, revert with me to our question, and place yourselves this time in the world we live in, in the world that *has* a future, that is yet uncompleted whilst we speak. In this unfinished world the alternative of 'materialism or theism?' is intensely practical; and it is worth while for us to spend some minutes of our hour in seeing that it is so.

How, indeed, does the program differ for us, according as we consider that the facts of experience up to date are purposeless configurations of blind atoms moving according to eternal laws, or that on the other hand they are due to the providence of God? As far as the past facts go, indeed, there is no difference. Those facts are in, are bagged, are captured; and the good that's in them is gained, be the atoms or be the God their cause. There are accordingly many materialists about us to-day who, ignoring altogether the future and practical aspects of the question, seek to eliminate the odium attaching to the word materialism, and even to eliminate the word itself, by showing that, if matter could give birth to all these gains, why then matter, functionally considered, is just as divine an entity as God, in fact coalesces with God, is what you mean by God. Cease, these persons advise us, to use either of these terms, with their outgrown opposition. Use a term free of the clerical connotations, on the one hand; of the suggestion of grossness, coarseness, ignobility, on the other. Talk of the primal mystery, of the unknowable energy, of the one and only power, instead of saying either God or matter. This is the course to which Mr. Spencer urges us; and

if philosophy were purely retrospective, he would thereby proclaim himself an excellent pragmatist.

But philosophy is prospective also, and, after finding what the world has been and done, and yielded, still asks the further question 'what does the world *promise*?' Give us a matter that promises *success*, that is bound by its laws to lead our world ever nearer to perfection, and any rational man will worship that matter as readily as Mr. Spencer worships his own so-called unknowable power. It not only has made for righteousness up to date, but it will make for righteousness forever; and that is all we need. Doing practically all that a God can do, it is equivalent to God, its function is a God's function, and in a world in which a God would be superfluous; from such a world a God could never lawfully be missed. 'Cosmic emotion' would here be the right name for religion.

But is the matter by which Mr. Spencer's process of cosmic evolution is carried on any such principle of never-ending perfection as this? Indeed it is not, for the future end of every cosmically evolved thing or system of things is foretold by science to be death tragedy; and Mr. Spencer, in confining himself to the aesthetic and ignoring the practical side of the controversy, has really contributed nothing serious to its relief. But apply now our principle of practical results, and see what a vital significance the question of materialism or theism immediately acquires.

Theism and materialism, so indifferent when taken retrospectively, point, when we take them prospectively, to wholly different outlooks of experience. For, according to the theory of mechanical evolution, the laws of redistribution of matter and motion, though they are certainly to thank for all the good hours which our organisms have ever yielded us and for all the ideals which our minds now frame, are yet fatally certain to undo their work again, and to redissolve everything that they

have once evolved. You all know the picture of the last state of the universe, which evolutionary science foresees. I can not state it better than in Mr. Balfour's words: "The energies of our system will decay, the glory of the sun will be dimmed, and the earth, tideless and inert, will no longer tolerate the race which has for a moment disturbed its solitude. Man will go down into the pit, and all his thoughts will perish. The uneasy consciousness which in this obscure corner has for a brief space broken the contented silence of the universe, will be at rest. Matter will know itself no longer. 'Imperishable monuments' and 'immortal deeds,' death itself, and love stronger than death, will be as if they had not been. Nor will anything that is, be better or worse for all that the labor, genius, devotion, and suffering of man have striven through countless ages to effect." ¹

That is the sting of it, that in the vast driftings of the cosmic weather, though many a jewelled shore appears, and many an enchanted cloud-bank floats away, long lingering ere it be dissolved—even as our world now lingers, for our joy—yet when these transient products are gone, nothing, absolutely *nothing* remains, to represent those particular qualities, those elements of preciousness which they may have enshrined. Dead and gone are they, gone utterly from the very sphere and room of being. Without an echo; without a memory; without an influence on aught that may come after, to make it care for similar ideals. This utter final wreck and tragedy is of the essence of scientific materialism as at present understood. The lower and not the higher forces are the eternal forces, or the last surviving forces within the only cycle of evolution which we can definitely see. Mr. Spencer believes this as much as any one; so why should he argue with us as if we were making silly aesthetic objections to the 'grossness' of 'matter and motion,' the principles of his philosophy, when what

really dismays us is the disconsolateness of its ulterior practical results?

No, the true objection to materialism is not positive but negative. It would be farcical at this day to make complaint of it for what it *is*, for 'grossness.' Grossness is what grossness *does*—we now know *that*. We make complaint of it, on the contrary, for what it is *not*—not a permanent warrant for our more ideal interests, not a fulfiller of our remotest hopes.

The notion of God, on the other hand, however inferior it may be in clearness to those mathematical notions so current in mechanical philosophy, has at least this practical superiority over them, that it guarantees an ideal order that shall be permanently preserved. A world with a God in it to say the last word, may indeed burn up or freeze, but we then think of him as still mindful of the old ideals and sure to bring them elsewhere to fruition; so that, where he is, tragedy is only provisional and partial, and shipwreck and dissolution not the absolutely final things. This need of an eternal moral order is one of the deepest needs of our breast. And those poets, like Dante and Wordsworth, who live on the conviction of such an order, owe to that fact the extraordinary tonic and consoling power of their verse. Here then, in these different emotional and practical appeals, in these adjustments of our concrete attitudes of hope and expectation, and all the delicate consequences which their differences entail, lie the real meanings of materialism and spiritualism—not in hair-splitting abstractions about matter's inner essence, or about the metaphysical attributes of God. Materialism means simply the denial that the moral order is eternal, and the cutting off of ultimate hopes; spiritualism means the affirmation of an eternal moral order and the letting loose of hope. Surely here is an issue genuine enough, for any one who feels it; and, as long as men

are men, it will yield matter for a serious philosophic debate.

But possibly some of you may still rally to their defence. Even whilst admitting that spiritualism and materialism make different prophecies of the world's future, you may yourselves pooh-pooh the difference as something so infinitely remote as to mean nothing for a sane mind. The essence of a sane mind, you may say, is to take shorter views, and to feel no concern about such chimaeras as the latter end of the world. Well, I can only say that if you say this, you do injustice to human nature. Religious melancholy is not disposed of by a simple flourish of the word insanity. The absolute things, the last things, the overlapping things, are the truly philosophic concerns; all superior minds feel seriously about them, and the mind with the shortest views is simply the mind of the more shallow man.

The issues of fact at stake in the debate are of course vaguely enough conceived by us at present. But spiritualistic faith in all its forms deals with a world of *promise*, while materialism's sun sets in a sea of disappointment. Remember what I said of the Absolute: it grants us moral holidays. Any religious view does this. It not only incites our more strenuous moments, but it also takes our joyous, careless, trustful moments, and it justifies them. It paints the grounds of justification vaguely enough, to be sure. The exact features of the saving future facts that our belief in God insures, will have to be ciphered out by the interminable methods of science: we can *study* our God only by studying his Creation. But we can *enjoy* our God, if we have one, in advance of all that labor. I myself believe that the evidence for God lies primarily in inner personal experiences. When they have once given you your God, his name means at least the benefit of the holiday. You remember what I said yesterday about the way in which truths clash and try

to 'down' each other. The truth of 'God' has to run the gauntlet of all our other truths. It is on trial by them and they on trial by it. Our *final* opinion about God can be settled only after all the truths have straightened themselves out together. Let us hope that they shall find a *modus vivendi*!

Let me pass to a very cognate philosophic problem, the *question of design in nature*. God's existence has from time immemorial been held to be proved by certain natural facts. Many facts appear as if expressly designed in view of one another. Thus the woodpecker's bill, tongue, feet, tail, etc., fit him wondrously for a world of trees, with grubs hid in their bark to feed upon. The parts of our eye fit the laws of light to perfection, leading its rays to a sharp picture on our retina. Such mutual fitting of things diverse in origin argued design, it was held; and the designer was always treated as a man-loving deity.

The first step in these arguments was to prove that the design *existed*. Nature was ransacked for results obtained through separate things being co-adapted. Our eyes, for instance, originate in intra-uterine darkness, and the light originates in the sun, yet see how they fit each other. They are evidently made *for* each other. Vision is the end designed, light and eyes the separate means devised for its attainment.

It is strange, considering how unanimously our ancestors felt the force of this argument, to see how little it counts for since the triumph of the darwinian theory. Darwin opened our minds to the power of chance-happenings to bring forth 'fit' results if only they have time to add themselves together. He showed the enormous waste of nature in producing results that get destroyed because of their unfitness. He also emphasized the number of adaptations which, if designed, would argue an evil rather than a good designer. *Here*, all

depends upon the point of view. To the grub under the bark the exquisite fitness of the woodpecker's organism to extract him would certainly argue a diabolical designer.

Theologians have by this time stretched their minds so as to embrace the darwinian facts, and yet to interpret them as still showing divine purpose. It used to be a question of purpose against mechanism, of one or the other. It was as if one should say "My shoes are evidently designed to fit my feet, hence it is impossible that they should have been produced by machinery." We know that they are both: they are made by a machinery itself designed to fit the feet with shoes. Theology need only stretch similarly the designs of God. As the aim of a football-team is not merely to get the ball to a certain goal (if that were so, they would simply get up on some dark night and place it there), but to get it there by a fixed *machinery of conditions*—the game's rules and the opposing players; so the aim of God is not merely, let us say, to make men and to save them, but rather to get this done through the sole agency of nature's vast machinery. Without nature's stupendous laws and counter-forces, man's creation and perfection, we might suppose, would be too insipid achievements for God to have proposed them.

This saves the form of the design-argument at the expense of its old easy human content. The designer is no longer the old man-like deity. His designs have grown so vast as to be incomprehensible to us humans. The *what* of them so overwhelms us that to establish the mere *that* of a designer for them becomes of very little consequence in comparison. We can with difficulty comprehend the *character* of a cosmic mind whose purposes are fully revealed by the strange mixture of goods and evils that we find in this actual world's particulars. Or rather we cannot by any possibility comprehend it. The mere

word 'design' by itself has no consequences and explains nothing. It is the barrenest of principles. The old question of *whether* there is design is idle. The real question is what is the world, whether or not it have a designer—and that can be revealed only by the study of all nature's particulars.

Remember that *no matter what* nature may have produced or may be producing, the means must necessarily have been adequate, must have been *fitted to that production*. The argument from fitness to design would consequently always apply, whatever were the product's character. The recent Mont-Pelée eruption, for example, required all previous history to produce that exact combination of ruined houses, human and animal corpses, sunken ships, volcanic ashes, etc., in just that one hideous configuration of positions. France had to be a nation and colonize Martinique. Our country had to exist and send our ships there. *If* God aimed at just that result, the means by which the centuries bent their influences towards it, showed exquisite intelligence. And so of any state of things whatever, either in nature or in history, which we find actually realized. For the parts of things must always make *some* definite resultant, be it chaotic or harmonious. When we look at what has actually come, the conditions must always appear perfectly designed to ensure it. We can always say, therefore, in any conceivable world, of any conceivable character, that the whole cosmic machinery *may* have been designed to produce it.

Pragmatically, then, the abstract word 'design' is a blank cartridge. It carries no consequences, it does no execution. *What* design? and *what* designer? are the only serious questions, and the study of facts is the only way of getting even approximate answers. Meanwhile, pending the slow answer from facts, any one who insists that there *is* a designer and who is sure he is a divine one, gets

a certain pragmatic benefit from the term—the same, in fact, which we saw that the terms God, Spirit, or the Absolute, yield us. ‘Design,’ worthless tho it be as a mere rationalistic principle set above or behind things for our admiration, becomes, if our faith concretes it into something theistic, a term of *promise*. Returning with it into experience, we gain a more confiding outlook on the future. If not a blind force but a seeing force runs things, we may reasonably expect better issues. This vague confidence in the future is the sole pragmatic meaning at present discernible in the terms design and designer. But if cosmic confidence is right not wrong, better not worse, that is a most important meaning. That much at least of possible ‘truth’ the terms will then have in them.

Let me take up another well-worn controversy, *the free-will problem*. Most persons who believe in what is called their free-will do so after the rationalistic fashion. It is a principle, a positive faculty or virtue added to man, by which his dignity is enigmatically augmented. He ought to believe it for this reason. Determinists, who deny it, who say that individual men originate nothing, but merely transmit to the future the whole push of the past cosmos of which they are so small an expression, diminish man. He is less admirable, stripped of this creative principle. I imagine that more than half of you share our instinctive belief in free-will, and that admiration of it as a principle of dignity has much to do with your fidelity.

But free-will has also been discussed pragmatically, and, strangely enough, the same pragmatic interpretation has been put upon it by both disputants. You know how large a part questions of *accountability* have played in ethical controversy. To hear some persons, one would suppose that all that ethics aims at is a code of merits and demerits. Thus does the old legal and theo-

logical leaven, the interest in crime and sin and punishment abide with us. 'Who's to blame? whom can we punish? whom will God punish?'—these preoccupations hang like a bad dream over man's religious history.

So both free-will and determinism have been inveighed against and called absurd, because each, in the eyes of its enemies, has seemed to prevent the 'imputability' of good or bad deeds to their authors. Queer antinomy this! Free-will means novelty, the grafting on to the past of something not involved therein. If our acts were predetermined, if we merely transmitted the push of the whole past, the free-willists say, how could we be praised or blamed for anything? We should be 'agents' only, not 'principals,' and where then would be our precious imputability and responsibility?

But where would it be if we *had* free-will? rejoin the determinists. If a 'free' act be a sheer novelty, that comes not *from* me, the previous me, but *ex nihilo*, and simply tacks itself on to me, how can *I*, the previous *I*, be responsible? How can I have any permanent *character* that will stand still long enough for praise or blame to be awarded? The chaplet of my days tumbles into a cast of disconnected beads as soon as the thread of inner necessity is drawn out by the preposterous indeterminist doctrine. Messrs. Fullerton and McTaggart have recently laid about them doughtily with this argument.

It may be good *ad hominem*, but otherwise it is pitiful. For I ask you, quite apart from other reasons, whether any man, woman or child, with a sense for realities, ought not to be ashamed to plead such principles as either dignity or imputability. Instinct and utility between them can safely be trusted to carry on the social business of punishment and praise. If a man does good acts we shall praise him, if he does bad acts we shall punish him,—anyhow, and quite apart from theories as to whether the acts result from what was previous in

him or are novelties in a strict sense. To make our human ethics revolve about the question of 'merit' is a piteous unreality—God alone can know our merits, if we have any. The real ground for supposing free-will is indeed pragmatic, but it has nothing to do with this contemptible right to punish which has made such a noise in past discussions of the subject.

Free-will pragmatically means *novelties in the world*, the right to expect that in its deepest elements as well as in its surface phenomena, the future may not identically repeat and imitate the past. That imitation *en masse* is there, who can deny? The general 'uniformity of nature' is presupposed by every lesser law. But nature may be only approximately uniform; and persons in whom knowledge of the world's past has bred pessimism (or doubts as to the world's good character, which become certainties if that character be supposed eternally fixed) may naturally welcome free-will as a *melioristic* doctrine. It holds up improvement as at least possible; whereas determinism assures us that our whole notion of possibility is born of human ignorance, and that necessity and impossibility between them rule the destinies of the world.

Free-will is thus a general cosmological theory of *promise*, just like the Absolute, God, Spirit or Design. Taken abstractly, no one of these terms has any inner content, none of them gives us any picture, and no one of them would retain the least pragmatic value in a world whose character was obviously perfect from the start. Elation at mere existence, pure cosmic emotion and delight, would, it seems to me, quench all interest in those speculations, if the world were nothing but a lubberland of happiness already. Our interest in religious metaphysics arises in the fact that our empirical future feels to us unsafe, and needs some higher guarantee. If the past and present were purely good, who could wish

FOUR: *The One and the Many*

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that the future might possibly not resemble them? Who could desire free-will? Who would not say, with Huxley, 'let me be wound up every day like a watch, to go right fatally, and I ask no better freedom.' 'Freedom' in a world already perfect could only mean freedom to *be worse*, and who could be so insane as to wish that? To be necessarily what it is, to be impossibly aught else, would put the last touch of perfection upon optimism's universe. Surely the only *possibility* that one can rationally claim is the possibility that things may be *better*. That possibility, I need hardly say, is one that, as the actual world goes, we have ample grounds for desiring.

Free-will thus has no meaning unless it be a doctrine of *relief*. As such, it takes its place with other religious doctrines. Between them, they build up the old wastes and repair the former desolations. Our spirit, shut within this courtyard of sense-experience, is always saying to the intellect upon the tower: 'Watchman, tell us of the night, if it aught of promise bear,' and the intellect gives it then these terms of promise.

Other than this practical significance, the words God, free-will, design, etc., have none. Yet dark tho they be in themselves, or intellectualistically taken, when we bear them into life's thicket with us the darkness *there* grows light about us. If you stop, in dealing with such words, with their definition, thinking that to be an intellectual finality, where are you? Stupidly staring at a pretentious sham! "Deus est Ens, a se, extra et supra omne genus, necessarium, unum, infinite perfectum, simplex, immutabile, immensum, aeternum, intelligens," etc.,—wherein is such a definition really instructive? It means less than nothing, in its pompous robe of adjectives. Pragmatism alone can read a positive meaning into it, and for that she turns her back upon the intellectualist point of view

altogether. 'God's in his heaven; all's right with the world!'—*That's* the real heart of your theology, and for that you need no rationalist definitions.

Why shouldn't all of us, rationalists as well as pragmatists, confess this? Pragmatism, so far from keeping her eyes bent on the immediate practical foreground, as she is accused of doing, dwells just as much upon the world's remotest perspectives.

See then how all these ultimate questions turn, as it were, upon their hinges; and from looking backwards upon principles, upon an *erkenntnistheoretische Ich*, a God, a *Kausalitätsprinzip*, a Design, a Free-will, taken in themselves, as something august and exalted above facts, —see, I say, how pragmatism shifts the emphasis and looks forward into facts themselves. The really vital question for us all is, What is this world going to be? What is life eventually to make of itself? The centre of gravity of philosophy must therefore alter its place. The earth of things, long thrown into shadow by the glories of the upper ether, must resume its rights. To shift the emphasis in this way means that philosophic questions will fall to be treated by minds of a less abstractionist type than heretofore, minds more scientific and individualistic in their tone yet not irreligious either. It will be an alteration in 'the seat of authority' that reminds one almost of the protestant reformation. And as, to papal minds, protestantism has often seemed a mere mess of anarchy and confusion, such, no doubt, will pragmatism often seem to ultra-rationalist minds in philosophy. It will seem so much sheer trash, philosophically. But life wags on, all the same, and compasses its ends, in protestant countries. I venture to think that philosophic protestantism will compass a not dissimilar prosperity.

FOUR: *The One and the Many*

THE ONE AND THE MANY

We saw in the last lecture that the pragmatic method, in its dealings with certain concepts, instead of ending with admiring contemplation, plunges forward into the river of experience with them and prolongs the perspective by their means. Design, free-will, the absolute mind, spirit instead of matter, have for their sole meaning a better promise as to this world's outcome. Be they false or be they true, the meaning of them is this meliorism. I have sometimes thought of the phenomenon called 'total reflexion' in Optics as a good symbol of the relation between abstract ideas and concrete realities, as pragmatism conceives it. Hold a tumbler of water a little above your eyes and look up through the water at its surface—or better still look similarly through the flat wall of an aquarium. You will then see an extraordinarily brilliant reflected image say of a candle-flame, or any other clear object, situated on the opposite side of the vessel. No ray, under these circumstances, gets beyond the water's surface: every ray is totally reflected back into the depths again. Now let the water represent the world of sensible facts, and let the air above it represent the world of abstract ideas. Both worlds are

real, of course, and interact; but they interact only at their boundary, and the *locus* of everything that lives, and happens to us, so far as full experience goes, is the water. We are like fishes swimming in the sea of sense, bounded above by the superior element, but unable to breathe it pure or penetrate it. We get our oxygen from it, however, we touch it incessantly, now in this part, now in that, and every time we touch it, we turn back into the water with our course re-determined and re-energized. The abstract ideas of which the air consists are indispensable for life, but irrespirable by themselves, as it were, and only active in their re-directing function. All similes are halting, but this one rather takes my fancy. It shows how something, not sufficient for life in itself, may nevertheless be an effective determinant of life elsewhere.

In this present hour I wish to illustrate the pragmatic method by one more application. I wish to turn its light upon the ancient problem of 'the one and the many.' I suspect that in but few of you has this problem occasioned sleepless nights, and I should not be astonished if some of you told me it had never vexed you at all. I myself have come, by long brooding over it, to consider it the most central of all philosophic problems, central because so pregnant. I mean by this that if you know whether a man is a decided monist or a decided pluralist, you perhaps know more about the rest of his opinions than if you give him any other name ending in *ist*. To believe in the one or in the many, that is the classification with the maximum number of consequences. So bear with me for an hour while I try to inspire you with my own interest in this problem.

Philosophy has often been defined as the quest or the vision of the world's unity. Few persons ever challenge this definition, which is true as far as it goes, for philosophy has indeed manifested above all things its interest in unity. But how about the *variety* in things? Is that such

an irrelevant matter? If instead of using the term philosophy, we talk in general of our intellect and its needs, we quickly see that unity is only one of them. Acquaintance with the details of fact is always reckoned, along with their reduction to system, as an indispensable mark of mental greatness. Your 'scholarly' mind, of encyclopedic, philological type, your man essentially of *learning*, has never lacked for praise along with your philosopher. What our intellect really aims at is neither variety nor unity taken singly, but *totality*.¹ In this, acquaintance with reality's diversities is as important as understanding their connexion. Curiosity goes *pari passu* with the systematizing passion.

In spite of this obvious fact the unity of things has always been considered more *illustrious*, as it were, than their variety. When a young man first conceives the notion that the whole world forms one great fact, with all its parts moving abreast, as it were, and interlocked, he feels as if he were enjoying a great insight, and looks superciliously on all who still fall short of this sublime conception. Taken thus abstractly as it first comes to one, the monistic insight is so vague as hardly to seem worth defending intellectually. Yet probably every one in this audience in some way cherishes it. A certain abstract monism, a certain emotional response to the character of oneness, as if it were a feature of the world not co-ordinate with its manyness, but vastly more excellent and eminent, is so prevalent in educated circles that we might almost call it a part of philosophic common sense. Of *course* the world is One, we say. How else could it be a world at all? Empiricists as a rule are as stout monists of this abstract kind as rationalists are.

The difference is that the empiricists are less dazzled. Unity doesn't blind them to everything else, doesn't quench their curiosity for special facts, whereas there is a kind of rationalist who is sure to interpret abstract unity

mystically and to forget everything else, to treat it as a principle; to admire and worship it; and thereupon to come to a full stop intellectually.

"The world is One!"—the formula may become a sort of number-worship. 'Three' and 'seven' have, it is true, been reckoned sacred numbers; but, abstractly taken, why is 'one' more excellent than 'forty-three,' or than 'two million and ten'? In this first vague conviction of the world's unity, there is so little to take hold of that we hardly know what we mean by it.

The only way to get forward with our notion is to treat it pragmatically. Granting the oneness to exist, what facts will be different in consequence? What will the unity be known as? The world is One—yes, but *how* one. What is the practical value of the oneness for us.

Asking such questions, we pass from the vague to the definite, from the abstract to the concrete. Many distinct ways in which a oneness predicated of the universe might make a difference, come to view. I will note successively the more obvious of these ways.

1. First, the world is at least *one subject of discourse*. If its manyness were so irremediable as to permit *no* union whatever of its parts, not even our minds could 'mean' the whole of it at once: they would be like eyes trying to look in opposite directions. But in point of fact we mean to cover the whole of it by our abstract term 'world' or 'universe,' which expressly intends that no part shall be left out. Such unity of discourse carries obviously no farther monistic specifications. A 'chaos,' once so named, has as much unity of discourse as a cosmos. It is an odd fact that many monists consider a great victory scored for their side when pluralists say 'the universe is many.' "The Universe!" they chuckle—"his speech bewrayeth him. He stands confessed of monism out of his own mouth." Well, let things be one in so far forth! You can then fling such a word as universe at

the whole collection of them, but what matters it? It still remains to be ascertained whether they are one in any further or more valuable sense.

2. Are they, for example, *continuous*? Can you pass from one to another, keeping always in your one universe without any danger of falling out? In other words, do the parts of our universe *hang together*, instead of being like detached grains of sand?

Even grains of sand hang together through the space in which they are embedded, and if you can in any way move through such space, you can pass continuously from number one of them to number two. Space and time are thus vehicles of continuity by which the world's parts hang together. The practical difference to us, resultant from these forms of union, is immense. Our whole motor life is based upon them.

3. There are innumerable other paths of practical continuity among things. Lines of *influence* can be traced by which they hang together. Following any such line you pass from one thing to another till you may have covered a good part of the universe's extent. Gravity and heat-conduction are such all-uniting influences, so far as the physical world goes. Electric, luminous and chemical influences follow similar lines of influence. But opaque and inert bodies interrupt the continuity here, so that you have to step round them, or change your mode of progress if you wish to get farther on that day. Practically, you have then lost your universe's unity; *so far as it was constituted by those first lines of influence*.

There are innumerable kinds of connexion that special things have with other special things; and the *ensemble* of any one of these connexions forms one sort of *system* by which things are conjoined. Thus men are conjoined in a vast network of *acquaintanceship*. Brown knows Jones, Jones knows Robinson, etc.; and *by choosing your farther intermediaries rightly* you may carry a

message from Jones to the Empress of China, or the Chief of the African Pigmies, or to any one else in the inhabited world. But you are stopped short, as by a non-conductor, when you choose one man wrong in this experiment. What may be called love-systems are grafted on the acquaintance-system. A loves (or hates) B; B loves (or hates) C, etc. But these systems are smaller than the great acquaintance-system that they presuppose.

Human efforts are daily unifying the world more and more in definite systematic ways. We found colonial, postal, consular, commercial systems, all the parts of which obey definite influences that propagate themselves within the system but not to facts outside of it. The result is innumerable little hangings-together of the world's parts within the larger hangings-together, little worlds, not only of discourse but of operation, within the wider universe. Each system exemplifies one type or grade of union, its parts being strung on that peculiar kind of relation, and the same part may figure in many different systems, as a man may hold various offices and belong to several clubs. From this 'systematic' point of view, therefore, the pragmatic value of the world's unity is that all these definite networks actually and practically exist. Some are more enveloping and extensive, some less so; they are superposed upon each other; and between them all they let no individual elementary part of the universe escape. Enormous as is the amount of disconnection among things (for these systematic influences and conjunctions follow rigidly exclusive paths), everything that exists is influenced in *some* way by something else, if you can only pick the way out rightly. Loosely speaking, and in general, it may be said that all things cohere and adhere to each other *somehow*, and that the universe exists practically in reticulated or concatenated forms which make of it a continuous or 'integrated' affair. Any kind of influence whatever helps to make the

world one, so far as you can follow it from next to next. You may then say that 'the world is One,'—meaning in these respects, namely, and just so far as they obtain. But just as definitely is it *not* One, so far as they do not obtain; and there is no species of connexion which will not fail, if, instead of choosing conductors for it you choose non-conductors. You are then arrested at your very first step and have to write the world down as a pure *many* from that particular point of view. If our intellect had been as much interested in disjunctive as it is in conjunctive relations, philosophy would have equally successfully celebrated the world's *disunion*.

The great point is to notice that the oneness and the manyness are absolutely co-ordinate here. Neither is primordial or more essential or excellent than the other. Just as with space, whose separating of things seems exactly on a par with its uniting of them, but sometimes one function and sometimes the other is what comes home to us most, so, in our general dealings with the world of influences, we now need conductors and now need non-conductors, and wisdom lies in knowing which is which at the appropriate moment.

4. All these systems of influence or non-influence may be listed under the general problem of the world's *causal unity*. If the minor causal influences among things should converge towards one common causal origin of them in the past, one great first cause for all that is, one might then speak of the absolute causal unity of the world. God's *fiat* on creation's day has figured in traditional philosophy as such an absolute cause and origin. Transcendental Idealism, translating 'creation' into 'thinking' (or 'willing to think') calls the divine act 'eternal' rather than 'first'; but the union of the many here is absolute, just the same—the many would not *be*, save for the One. Against this notion of the unity of origin of all things there has always stood the pluralistic

notion of an eternal self-existing many in the shape of atoms or even of spiritual units of some sort. The alternative has doubtless a pragmatic meaning, but perhaps, as far as these lectures go, we had better leave the question of unity of origin unsettled.

5. The most important sort of union that obtains among things, pragmatically speaking, is their *generic unity*. Things exist in kinds, there are many specimens in each kind, and what the 'kind' implies for one specimen, it implies also for every other specimen of that kind. We can easily conceive that every fact in the world might be singular, that is, unlike any other fact and sole of its kind. In such a world of singulars our logic would be useless, for logic works by predicating of the single instance what is true of all its kind. With no two things alike in the world, we should be unable to reason from our past experiences to our future ones. The existence of so much generic unity in things is thus perhaps the most momentous pragmatic specification of what it may mean to say 'the world is One.' *Absolute* generic unity would obtain if there were one *summum genus* under which all things without exception could be eventually subsumed. 'Beings,' 'thinkables,' 'experiences,' would be candidates for this position. Whether the alternatives expressed by such words have any pragmatic significance or not, is another question which I prefer to leave unsettled just now.

6. Another specification of what the phrase 'the world is one' may mean is *unity of purpose*. An enormous number of things in the world subserve a common purpose. All the man-made systems, administrative, industrial, military, or what not, exist each for its controlling purpose. Every living being pursues its own peculiar purposes. They co-operate, according to the degree of their development, in collective or tribal purposes, larger ends thus enveloping lesser ones, until an abso-

lutely single, final and climacteric purpose subserved by all things without exception might conceivably be reached. It is needless to say that the appearances conflict with such a view. Any resultant, as I said in my third lecture, *may* have been purposed in advance, but none of the results we actually know in this world have in point of fact been purposed in advance in all their details. Men and nations start with a vague notion of being rich, or great, or good. Each step they make brings unforeseen chances into sight, and shuts out older vistas, and the specifications of the general purpose have to be daily changed. What is reached in the end may be better or worse than what was proposed, but it is always more complex and different.

Our different purposes also are at war with each other. Where one can't crush the other out, they compromise; and the result is again different from what any one distinctly proposed beforehand. Vaguely and generally, much of what was purposed may be gained; but everything makes strongly for the view that our world is incompletely unified teleologically and is still trying to get its unification better organized.

Whoever claims *absolute* teleological unity, saying that there is one purpose that every detail of the universe subserves, dogmatizes at his own risk. Theologians who dogmatize thus find it more and more impossible, as our acquaintance with the warring interests of the world's parts grows more concrete, to imagine what the one climacteric purpose may possibly be like. We see indeed that certain evils minister to ulterior goods, that the bitter makes the cocktail better, and that a bit of danger or hardship puts us agreeably to our trumps. We can vaguely generalize this into the doctrine that all the evil in the universe is but instrumental to its greater perfection. But the scale of the evil actually in sight defies all human tolerance; and transcendental idealism.

in the pages of a Bradley or a Royce, brings us no farther than the book of Job did—God's ways are not our ways, so let us put our hands upon our mouth. A God who can relish such superfluities of horror is no God for human beings to appeal to. His animal spirits are too high. In other words the 'Absolute' with his one purpose, is not the man-like God of common people.

7. *Aesthetic union* among things also obtains, and is very analogous to teleological union. Things tell a story. Their parts hang together so as to work out a climax. They play into each other's hands expressively. Retrospectively, we can see that altho no definite purpose presided over a chain of events, yet the events fell into a dramatic form, with a start, a middle, and a finish. In point of fact all stories end; and here again the point of view of a many is the more natural one to take. The world is full of partial stories that run parallel to one another, beginning and ending at odd times. They mutually interlace and interfere at points, but we can not unify them completely in our minds. In following your life-history, I must temporarily turn my attention from my own. Even a biographer of twins would have to press them alternately upon his reader's attention.

It follows that whoever says that the whole world tells one story utters another of those monistic dogmas that a man believes at his risk. It is easy to see the world's history pluralistically, as a rope of which each fibre tells a separate tale; but to conceive of each cross-section of the rope as an absolutely single fact, and to sum the whole longitudinal series into one being living an undivided life, is harder. We have indeed the analogy of embryology to help us. The microscopist makes a hundred flat cross-sections of a given embryo, and mentally unites them into one solid whole. But the great world's ingredients, so far as they are beings, seem, like the rope's fibres, to be discontinuous, cross-wise, and to co-

here only in the longitudinal direction. Followed in that direction they are many. Even the embryologist, when he follows the *development* of his object, has to treat the history of each single organ in turn. *Absolute* aesthetic union is thus another barely abstract ideal. The world appears as something more epic than dramatic.

So far, then, we see how the world is unified by its many systems, kinds, purposes, and dramas. That there is more union in all these ways than openly appears is certainly true. That there *may* be one sovereign purpose, system, kind, and story, is a legitimate hypothesis. All I say here is that it is rash to affirm this dogmatically without better evidence than we possess at present.

8. The *great* monistic *denkmittel* for a hundred years past has been the notion of *the one Knower*. The many exist only as objects for his thought—exist in his dream, as it were; and *as he knows* them, they have one purpose, form one system, tell one tale for him. This notion of an *all enveloping noetic unity* in things is the sublimest achievement of intellectualist philosophy. Those who believe in the Absolute, as the all-knower is termed, usually say that they do so for coercive reasons, which clear thinkers can not evade. The Absolute has far-reaching practical consequences, to some of which I drew attention in my second lecture. Many kinds of difference important to us would surely follow from its being true. I can not here enter into all the logical proofs of such a Being's existence, farther than to say that none of them seem to me sound. I must therefore treat the notion of an All-Knower simply as an hypothesis, exactly on a par logically with the pluralist notion that there is no point of view, no focus of information extant, from which the entire content of the universe is visible at once. "God's conscience," says Professor Royce,² "forms in its wholeness one luminously transparent conscious moment"—this is the type of noetic unity on which rationalism

insists. Empiricism on the other hand is satisfied with the type of noetic unity that is humanly familiar. Everything gets known by *some* knower along with something else; but the knowers may in the end be irreducibly many, and the greatest knower of them all may yet not know the whole of everything, or even know what he does know at one single stroke:—he may be liable to forget. Whichever type obtained, the world would still be a universe noetically. Its parts would be conjoined by knowledge, but in the one case the knowledge would be absolutely unified, in the other it would be strung along and overlapped.

The notion of one instantaneous or eternal Knower—either adjective here means the same thing—is, as I said, the great intellectualist achievement of our time. It has practically driven out that conception of 'Substance' which earlier philosophers set such store by, and by which so much unifying work used to be done—universal substance which alone has being in and from itself, and of which all the particulars of experience are but forms to which it gives support. Substance has succumbed to the pragmatic criticisms of the English school. It appears now only as another name for the fact that phenomena as they come are actually grouped and given in coherent forms, the very forms in which we finite knowers experience or think them together. These forms of conjunction are as much parts of the tissue of experience as are the terms which they connect; and it is a great pragmatic achievement for recent idealism to have made the world hang together in these directly representable ways instead of drawing its unity from the 'inherence' of its parts—whatever that may mean—in an unimaginable principle behind the scenes.

'The world is One,' therefore, just so far as we experience it to be concatenated, One by as many definite conjunctions as appear. But then also *not* One by just as

many definite *dis-junctions* as we find. The oneness and the manyness of it thus obtain in respects which can be separately named. It is neither a universe pure and simple nor a multiverse pure and simple. And its various manners of being One suggest, for their accurate ascertainment, so many distinct programs of scientific work. Thus the pragmatic question 'What is the oneness known as? What practical difference will it make?' saves us from all feverish excitement over it as a principle of sublimity and carries us forward into the stream of experience with a cool head. The stream may indeed reveal far more connexion and union than we now suspect, but we are not entitled on pragmatic principles to claim absolute oneness in any respect in advance.

It is so difficult to see definitely what absolute oneness can mean, that probably the majority of you are satisfied with the sober attitude which we have reached. Nevertheless there are possibly some radically monistic souls among you who are not content to leave the one and the many on a *par*. Union of various grades, union of diverse types, union that stops at non-conductors, union that merely goes from next to next, and means in many cases outer nextness only, and not a more internal bond, union of concatenation, in short; all that sort of thing seems to you a halfway stage of thought. The oneness of things, superior to their manyness, you think must also be more deeply true, must be the more real aspect of the world. The pragmatic view, you are sure, gives us a universe imperfectly rational. The real universe must form an unconditional unit of being, something consolidated, with its parts co-implicated through and through. Only then could we consider our estate completely rational.

There is no doubt whatever that this ultramonistic way of thinking means a great deal to many minds. "One Life, One Truth, one Love, one Principle, One

Good, One God"—I quote from a Christian Science leaflet which the day's mail brings into my hands—beyond doubt such a confession of faith has pragmatically an emotional value, and beyond doubt the word 'one' contributes to the value quite as much as the other words. But if we try to realize *intellectually* what we can possibly *mean* by such a glut of oneness we are thrown right back upon our pragmatistic determinations again. It means either the mere name One, the universe of discourse; or it means the sum total of all the ascertainable particular conjunctions and concatenations; or, finally, it means some one vehicle of conjunction treated as all-inclusive, like one origin, one purpose, or one knower. In point of fact it always means one *knower* to those who take it intellectually to-day. The one knower involves, they think, the other forms of conjunction. His world must have all its parts co-implicated in the one logical-aesthetical-teleological unit-picture which is his eternal dream.

The character of the absolute knower's picture is however so impossible for us to represent clearly, that we may fairly suppose that the authority which absolute monism undoubtedly possesses, and probably always will possess over some persons, draws its strength far less from intellectual than from mystical grounds. To interpret absolute monism worthily, be a mystic. Mystical states of mind in every degree are shown by history, usually tho not always, to make for the monistic view. This is no proper occasion to enter upon the general subject of mysticism, but I will quote one mystical pronouncement to show just what I mean. The paragon of all monistic systems is the Vedânta philosophy of Hindostan, and the paragon of Vedântist missionaries was the late Swami Vivekananda who visited our land some years ago. The method of Vedântism is the mystical method. You do not reason, but after going through a certain discipline

you see, and having seen, you can report the truth. Vivekananda thus reports the truth in one of his lectures here:

“Where is there any more misery for him who sees this Oneness in the universe, this Oneness of life, Oneness of everything? . . . This separation between man and man, man and woman, man and child, nation from nation, earth from moon, moon from sun, this separation between atom and atom is the cause really of all the misery, and the Vedânta says this separation does not exist, it is not real. It is merely apparent, on the surface. In the heart of things there is unity still. If you go inside you find that unity between man and man, women and children, races and races, high and low, rich and poor, the gods and men: all are One, and animals too, if you go deep enough, and he who has attained to that has no more delusion. . . . Where is there any more delusion for him? What can delude him? He knows the reality of everything, the secret of everything. Where is there any more misery for him? What does he desire? He has traced the reality of everything unto the Lord, that centre, that Unity of everything, and that is Eternal Bliss, Eternal Knowledge, Eternal Existence. Neither death nor disease nor sorrow nor misery nor discontent is There . . . In the Centre, the reality, there is no one to be mourned for, no one to be sorry for. He has penetrated everything, the Pure One, the Formless, the Bodiless, the Stainless, He the Knower, He the great Poet, the Self-Existent, He who is giving to every one what he deserves.”

Observe how radical the character of the monism here is. Separation is not simply overcome by the One, it is denied to exist. There is no many. We are not parts of the One; It has no parts; and since in a sense we undeniably *are*, it must be that each of us is the One, indivisibly and totally. *An Absolute One, and I that One*,—surely

we have here a religion which, emotionally considered, has a high pragmatic value; it imparts a perfect sumptuousness of security. As our Swami says in another place:

"When man has seen himself as One with the infinite Being of the universe, when all separateness has ceased, when all men, all women, all angels, all gods, all animals, all plants, the whole universe has been melted into that oneness, then all fear disappears. Whom to fear? Can I hurt myself? Can I kill myself? Can I injure myself? Do you fear yourself? Then will all sorrow disappear. What can cause me sorrow? I am the One Existence of the universe. Then all jealousies will disappear; of whom to be jealous? Of myself? Then all bad feelings disappear. Against whom shall I have this bad feeling? Against myself? There is none in the universe but me . . . kill out this differentiation, kill out this superstition that there are many. 'He who, in this world of many, sees that One; he who, in this mass of insentientcy, sees that One Sentient Being; he who in this world of shadow, catches that Reality, unto him belongs eternal peace, unto none else, unto none else.'"

We all have some ear for this monistic music: it elevates and reassures. We all have at least the germ of mysticism in us. And when our idealists recite their arguments for the Absolute, saying that the slightest union admitted anywhere carries logically absolute Oneness with it, and that the slightest separation admitted anywhere logically carries disunion remediless and complete, I cannot help suspecting that the palpable weak places in the intellectual reasonings they use are protected from their own criticism by a mystical feeling that, logic or no logic, absolute Oneness must somehow at any cost be true. Oneness overcomes *moral* separateness at any rate. In the passion of love we have the mystic germ of what might mean a total union of all sentient life. This mystical germ wakes up in us on

hearing the monistic utterances, acknowledges their authority, and assigns to intellectual considerations a secondary place.

I will dwell no longer on these religious and moral aspects of the question in this lecture. When I come to my final lecture there will be something more to say.

Leave then out of consideration for the moment the authority which mystical insights may be conjectured eventually to possess; treat the problem of the One and the Many in a purely intellectual way; and we see clearly enough where pragmatism stands. With her criterion of the practical differences that theories make, we see that she must equally abjure absolute monism and absolute pluralism. The world is One just so far as its parts hang together by any definite connexion. It is many just so far as any definite connexion fails to obtain. And finally it is growing more and more unified by those systems of connexion at least which human energy keeps framing as time goes on.

It is possible to imagine alternative universes to the one we know, in which the most various grades and types of union should be embodied. Thus the lowest grade of universe would be a world of mere *withness*, of which the parts were only strung together by the conjunction 'and.' Such a universe is even now the collection of our several inner lives. The spaces and times of your imagination; the objects and events of your day-dreams are not only more or less incoherent *inter se*, but are wholly out of definite relation with the similar contents of any one else's mind. Our various reveries now as we sit here compenetrates each other idly without influencing or interfering. They coexist, but in no order and in no receptacle, being the nearest approach to an absolute 'many' that we can conceive. We can not even imagine any reason why they *should* be known all together, and we can imagine even less, if they were known together,

how they could be known as one systematic whole

But add our sensations and bodily actions, and the union mounts to a much higher grade. Our *audita et visa* and our acts fall into those receptacles of time and space in which each event finds its date and place. They form 'things' and are of 'kinds' too, and can be classed. Yet we can imagine a world of things and of kinds in which the causal interactions with which we are so familiar should not exist. Everything there might be inert towards everything else, and refuse to propagate its influence. Or gross mechanical influences might pass, but no chemical action. Such worlds would be far less unified than ours. Again there might be complete physico-chemical interaction, but no minds; or minds, but altogether private ones, with no social life; or social life limited to acquaintance, but no love; or love, but no customs or institutions that should systematize it. No one of these grades of universe would be absolutely irrational or disintegrated, inferior tho it might appear when looked at from the higher grades. For instance, if our minds should ever become 'telepathically' connected, so that we knew immediately, or could under certain conditions know immediately, each what the other was thinking, the world we now live in would appear to the thinkers in that world to have been of an inferior grade.

With the whole of past eternity open for our conjectures to range in, it may be lawful to wonder whether the various kinds of union now realized in the universe that we inhabit may not possibly have been successively evolved after the fashion in which we now see human systems evolving in consequence of human needs. If such an hypothesis were legitimate, total oneness would appear at the end of things rather than at their origin. In other words the notion of the 'Absolute' would have to be replaced by that of the 'Ultimate.' The two notions would have the same content—the maximally unified

content of fact, namely—but their time-relations would be positively reversed.³

After discussing the unity of the universe in this pragmatic way, you ought to see why I said in my second lecture, borrowing the word from my friend G. Papini, that pragmatism tends to *unstiffen* all our theories. The world's oneness has generally been affirmed abstractly only, and as if any one who questioned it must be an idiot. The temper of monists has been so vehement, as almost at times to be convulsive; and this way of holding a doctrine does not easily go with reasonable discussion and the drawing of distinctions. The theory of the Absolute, in particular, has had to be an article of faith, affirmed dogmatically and exclusively. The One and All, first in the order of being and of knowing, logically necessary itself, and uniting all lesser things in the bonds of mutual necessity, how could it allow of any mitigation of its inner rigidity? The slightest suspicion of pluralism, the minutest wiggle of independence of any one of its parts from the control of the totality would ruin it. Absolute unity brooks no degrees,—as well might you claim absolute purity for a glass of water because it contains but a single little cholera-germ. The independence, however infinitesimal, of a part, however small, would be to the Absolute as fatal as a cholera-germ.

Pluralism on the other hand has no need of this dogmatic rigoristic temper. Provided you grant *some* separation among things, some tremor of independence, some free play of parts on one another, some real novelty or chance, however minute, she is amply satisfied, and will allow you any amount, however great, of real union. How much of union there may be is a question that she thinks can only be decided empirically. The amount may be enormous, colossal; but absolute monism is shattered if, along with all the union, there has to be granted the slightest modicum, the most incipient nascency, or the

most residual trace, of a separation that is not 'overcome.'

Pragmatism, pending the final empirical ascertainment of just what the balance of union and disunion among things may be, must obviously range herself upon the pluralistic side. Some day, she admits, even total union, with one knower, one origin, and a universe consolidated in every conceivable way, may turn out to be the most acceptable of all hypotheses. Meanwhile the opposite hypothesis, of a world imperfectly unified still, and perhaps always to remain so, must be sincerely entertained. This latter hypothesis is pluralism's doctrine. Since absolute monism forbids its being even considered seriously, branding it as irrational from the start, it is clear that pragmatism must turn its back on absolute monism, and follow pluralism's more empirical path.

This leaves us with the common-sense world, in which we find things partly joined and partly disjoined. 'Things,' then, and their 'conjunctions'—what do such words mean, pragmatically handled? In my next lecture, I will apply the pragmatic method to the stage of philosophizing known as Common Sense.

FIVE: *Pragmatism and Common Sense*

PRAGMATISM AND COMMON SENSE

In the last lecture we turned ourselves from the usual way of talking of the universe's oneness as a principle, sublime in all its blankness, towards a study of the special kinds of union which the universe enfolds. We found many of these to coexist with kinds of separation equally real. 'How far am I verified?' is the question which each kind of union and each kind of separation asks us here, so as good pragmatists we have to turn our face towards experience, towards 'facts.'

Absolute oneness remains, but only as an hypothesis, and that hypothesis is reduced nowadays to that of an omniscient knower who sees all things without exception as forming one single systematic fact. But the knower in question may still be conceived either as an Absolute or as an Ultimate; and over against the hypothesis of him in either form the counter-hypothesis that the widest field of knowledge that ever was or will be still contains some ignorance, may be legitimately held. Some bits of information always may escape.

This is the hypothesis of *noetic pluralism*, which monists consider so absurd. Since we are bound to treat it as

respectfully as noetic monism, until the facts shall have tipped the beam, we find that our pragmatism, tho originally nothing but a method, has forced us to be friendly to the pluralistic view. It *may* be that some parts of the world are connected so loosely with some other parts as to be strung along by nothing but the copula *and*. They might even come and go without those other parts suffering any internal change. This pluralistic view, of a world of *additive* constitution, is one that pragmatism is unable to rule out from serious consideration. But this view leads one to the farther hypothesis that the actual world, instead of being complete 'eternally,' as the monists assure us, may be eternally incomplete, and at all times subject to addition or liable to loss.

It is at any rate incomplete in one respect, and flagrantly so. The very fact that we debate this question shows that *our knowledge* is incomplete at present and subject to addition. In respect of the knowledge it contains the world does genuinely change and grow. Some general remarks on the way in which our knowledge completes itself—when it does complete itself—will lead us very conveniently into our subject for this lecture, which is 'Common Sense.'

To begin with, our knowledge grows *in spots*. The spots may be large or small, but the knowledge never grows all over: some old knowledge always remains what it was. Your knowledge of pragmatism, let us suppose, is growing now. Later, its growth may involve considerable modification of opinions which you previously held to be true. But such modifications are apt to be gradual. To take the nearest possible example, consider these lectures of mine. What you first gain from them is probably a small amount of new information, a few new definitions, or distinctions, or points of view. But while these special ideas are being added, the rest of your knowledge stands still, and only gradually will you 'line up' your pre-

vious opinions with the novelties I am trying to instil, and modify to some slight degree their mass.

You listen to me now, I suppose, with certain prepossessions as to my competency, and these affect your reception of what I say, but were I suddenly to break off lecturing, and to begin to sing 'We won't go home till morning' in a rich baritone voice, not only would that new fact be added to your stock, but it would oblige you to define me differently, and that might alter your opinion of the pragmatic philosophy, and in general bring about a rearrangement of a number of your ideas. Your mind in such processes is strained, and sometimes painfully so, between its older beliefs and the novelties which experience brings along.

Our minds thus grow in spots; and like grease-spots, the spots spread. But we let them spread as little as possible: we keep unaltered as much of our old knowledge, as many of our old prejudices and beliefs, as we can. We patch and tinker more than we renew. The novelty soaks in; it stains the ancient mass; but it is also tinged by what absorbs it. Our past apperceives and co-operates; and in the new equilibrium in which each step forward in the process of learning terminates, it happens relatively seldom that the new fact is added *raw*. More usually it is embedded cooked, as one might say, or stewed down in the sauce of the old.

New truths thus are resultants of new experiences and of old truths combined and mutually modifying one another. And since this is the case in the changes of opinion of today, there is no reason to assume that it has not been so at all times. It follows that very ancient modes of thought may have survived through all the later changes in men's opinions. The most primitive ways of thinking may not yet be wholly expunged. Like our five fingers, our ear-bones, our rudimentary caudal appendage, or our other 'vestigial' peculiarities, they may re-

main as indelible tokens of events in our race-history. Our ancestors may at certain moments have struck into ways of thinking which they might conceivably not have found. But once they did so, and after the fact, the inheritance continues. When you begin a piece of music in a certain key, you must keep the key to the end. You may alter your house *ad libitum*, but the ground-plan of the first architect persists—you can make great changes, but you can not change a Gothic church into a Doric temple. You may rinse and rinse the bottle, but you can't get the taste of the medicine or whiskey that first filled it wholly out.

My thesis now is this, that *our fundamental ways of thinking about things are discoveries of exceedingly remote ancestors, which have been able to preserve themselves throughout the experience of all subsequent time.* They form one great stage of equilibrium in the human mind's development, the stage of *common sense*. Other stages have grafted themselves upon this stage, but have never succeeded in displacing it. Let us consider this common-sense stage first, as if it might be final.

In practical talk, a man's common sense means his good judgment, his freedom from eccentricity, his *gumption*, to use the vernacular word. In philosophy it means something entirely different, it means his use of certain intellectual forms or categories of thought. Were we lobsters, or bees, it might be that our organization would have led to our using quite different modes from these of apprehending our experiences. It *might* be too (we can not dogmatically deny this) that such categories, unimaginable by us to-day, would have proved on the whole as serviceable for handling our experiences mentally as those which we actually use.

If this sounds paradoxical to any one, let him think of analytical geometry. The identical figures which Euclid defined by intrinsic relations were defined by Descartes

by the relations of their points to adventitious co-ordinates, the result being an absolutely different and vastly more potent way of handling curves. All our conceptions are what the Germans call *Denkmittel*, means by which we handle facts by thinking them. Experience merely as such doesn't come ticketed and labelled, we have first to discover what it is. Kant speaks of it as being in its first intention a *gewühl der erscheinungen*, a *rhapsodie der wahrnehmungen*, a mere motley which we have to unify by our wits. What we usually do is first to frame some system of concepts mentally classified, serialized, or connected in some intellectual way, and then to use this as a tally by which we 'keep tab' on the impressions that present themselves. When each is referred to some possible place in the conceptual system, it is thereby 'understood.' This notion of parallel 'manifolds' with their elements standing reciprocally in 'one-to-one relations,' is proving so convenient nowadays in mathematics and logic as to supersede more and more the older classificatory conceptions. There are many conceptual systems of this sort; and the sense manifold is also such a system. Find a one-to-one relation for your sense-impressions *anywhere* among the concepts, and in so far forth you rationalize the impressions. But obviously you can rationalize them by using various conceptual systems.

The old common-sense way of rationalizing them is by a set of concepts of which the most important are these:

Thing;

The same or different;

Kinds;

Minds;

Bodies;

One Time;

One Space;

Subjects and attributes;

Causal influences;

The fancied;

The real.

We are now so familiar with the order that these notions have woven for us out of the everlasting weather of our perceptions that we find it hard to realize how little of a fixed routine the perceptions follow when taken by themselves. The word weather is a good one to use here. In Boston, for example, the weather has almost no routine, the only law being that if you have had any weather for two days, you will probably but not certainly have another weather on the third. Weather-experience as it thus comes to Boston is discontinuous, and chaotic. In point of temperature, of wind, rain or sunshine, it *may* change three times a day. But the Washington weather-bureau intellectualizes this disorder by making each successive bit of Boston weather *episodic*. It refers it to its place and moment in a continental cyclone, on the history of which the local changes everywhere are strung as beads are strung upon a cord.

Now it seems almost certain that young children and the inferior animals take all their experiences very much as uninstructed Bostonians take their weather. They know no more of time, or space, as world-receptacles, or of permanent subjects and changing predicates, or of causes, or kinds, or thoughts, or things, than our common people know of continental cyclones. A baby's rattle drops out of his hand, but the baby looks not for it. It has 'gone out' for him, as a candle-flame goes out; and it comes back, when you replace it in his hand, as the flame comes back when relit. The idea of its being a 'thing,' whose permanent existence by itself he might interpolate between its successive apparitions has evidently not occurred to him. It is the same with dogs. Out of sight, out of mind, with them. It is pretty evident that

they have no *general* tendency to interpolate 'things.' Let me quote here a passage from my colleague G. Santayana's book.

"If a dog, while sniffing about contentedly, sees his master arriving after a long absence . . . the poor brute asks for no reason why his master went, why he has come again, why he should be loved, or why presently while lying at his feet you forget him and begin to grunt and dream of the chase—all that is an utter mystery, utterly unconsidered. Such experience has variety, scenery, and a certain vital rhythm; its story might be told in dithyrambic verse. It moves wholly by inspiration; every event is providential, every act unpremeditated. Absolute freedom and absolute helplessness have met together: you depend wholly on divine favor, yet that unfathomable agency is not distinguishable from your own life. . . . [But] the figures even of that disordered drama have their exits and their entrances; and their cues can be gradually discovered by a being capable of fixing his attention and retaining the order of events. . . . In proportion as such understanding advances, each moment of experience becomes consequential and prophetic of the rest. The calm places in life are filled with power and its spasms with resource. No emotion can overwhelm the mind, for of none is the basis or issue wholly hidden; no event can disconcert it altogether, because it sees beyond. Means can be looked for to escape from the worst predicament; and whereas each moment had been formerly filled with nothing but its own adventures and surprised emotion, each now makes room for the lesson of what went before and surmises what may be the plot of the whole." ¹

Even to-day science and philosophy are still laboriously trying to part fancies from realities in our experience; and in primitive times they made only the most incipient distinctions in this line. Men believed whatever

they thought with any liveliness, and they mixed their dreams with their realities inextricably. The categories of 'thought' and 'things' are indispensable here—instead of being realities we now call certain experiences only 'thoughts.' There is not a category, among those enumerated, of which we may not imagine the use to have thus originated historically and only gradually spread.

That one Time which we all believe in and in which each event has its definite date, that one Space in which each thing has its position, these abstract notions unify the world incomparably; but in their finished shape as concepts how different they are from the loose unordered time-and-space experiences of natural men! Everything that happens to us brings its own duration and extension, and both are vaguely surrounded by a marginal 'more' that runs into the duration and extension of the next thing that comes. But we soon lose all our definite bearings; and not only do our children make no distinction between yesterday and the day before yesterday, the whole past being churned up together, but we adults still do so whenever the times are large. It is the same with spaces. On a map I can distinctly see the relation of London, Constantinople, and Peking to the place where I am; in reality I utterly fail to *feel* the facts which the map symbolizes. The directions and distances are vague, confused and mixed. Cosmic space and cosmic time, so far from being the intuitions that Kant said they were, are constructions as patently artificial as any that science can show. The great majority of the human race never use these notions, but live in plural times and spaces, interpenetrant and *durcheinander*.

Permanent 'things' again; the 'same' thing and its various 'appearances' and 'alterations'; the different 'kinds' of thing; with the 'kind' used finally as a 'predicate,' of which the thing remains the 'subject'—what a straightening of the tangle of our experience's immediate flux and

sensible variety does this list of terms suggest! And it is only the smallest part of his experience's flux that any one actually does straighten out by applying to it these conceptual instruments. Out of them all our lowest ancestors probably used only, and then most vaguely and inaccurately, the notion of 'the same again.' But even then if you had asked them whether the same were a 'thing' that had endured throughout the unseen interval, they would probably have been at a loss, and would have said that they had never asked that question, or considered matters in that light.

Kinds, and sameness of kind—what colossally useful *denkmittel* for finding our way among the many! The manyness might conceivably have been absolute. Experiences might have all been singulars, no one of them occurring twice. In such a world logic would have had no application; for kind and sameness of kind are logic's only instruments. Once we know that whatever is of a kind is also of that kind's kind, we can travel through the universe as if with seven-league boots. Brutes surely never use these abstractions, and civilized men use them in most various amounts.

Causal influence, again! This, if anything, seems to have been an antediluvian conception; for we find primitive men thinking that almost everything is significant and can exert influence of some sort. The search for the more definite influences seems to have started in the question: "Who, or what, is to blame?"—for any illness, namely, or disaster, or untoward thing. From this centre the search for causal influences has spread. Hume and 'Science' together have tried to eliminate the whole notion of influence, substituting the entirely different *denkmittel* of 'law.' But law is a comparatively recent invention, and influence reigns supreme in the older realm of common sense.

The 'possible,' as something less than the actual and

more than the wholly unreal, is another of these magisterial notions of common sense. Criticise them as you may, they persist; and we fly back to them the moment critical pressure is relaxed. 'Self,' 'body,' in the substantial or metaphysical sense—no one escapes subjection to *those* forms of thought. In practice, the common-sense *denkmittel* are uniformly victorious. Every one, however instructed, still thinks of a 'thing' in the common-sense way, as a permanent unit-subject that 'supports' its attributes interchangeably. No one stably or sincerely uses the more critical notion, of a group of sense-qualities united by a law. With these categories in our hand, we make our plans and plot together, and connect all the remoter parts of experience with what lies before our eyes. Our later and more critical philosophies are mere fads and fancies compared with this natural mother-tongue of thought.

Common sense appears thus as a perfectly definite stage in our understanding of things, a stage that satisfies in an extraordinarily successful way the purposes for which we think. 'Things' do exist, even when we do not see them. Their 'kinds' also exist. Their 'qualities' are what they act by, and are what we act on; and these also exist. These lamps shed their quality of light on every object in this room. We intercept it on its way whenever we hold up an opaque screen. It is the very sound that my lips emit that travels into your ears. It is the sensible heat of the fire that migrates into the water in which we boil an egg; and we can change the heat into coolness by dropping in a lump of ice. At this stage of philosophy all non-European men without exception have remained. It suffices for all the necessary practical ends of life; and, among our race even, it is only the highly sophisticated specimens, the minds debauched by learning, as Berkeley calls them, who have ever even suspected common sense of not being absolutely true.

But when we look back, and speculate as to how the common-sense categories may have achieved their wonderful supremacy, no reason appears why it may not have been by a process just like that by which the conceptions due to Democritus, Berkeley, or Darwin, achieved their similar triumphs in more recent times. In other words, they may have been successfully *discovered* by prehistoric geniuses whose names the night of antiquity has covered up; they may have been verified by the immediate facts of experience which they first fitted; and then from fact to fact and from man to man they may have *spread*, until all language rested on them and we are now incapable of thinking naturally in any other terms. Such a view would only follow the rule that has proved elsewhere so fertile, of assuming the vast and remote to conform to the laws of formation that we can observe at work in the small and near.

For all utilitarian practical purposes these conceptions amply suffice; but that they began at special points of discovery and only gradually spread from one thing to another, seems proved by the exceedingly dubious limits of their application to-day. We assume for certain purposes one 'objective' Time that *aequabiliter fluit*, but we don't livingly believe in or realize any such equally-flowing time. 'Space' is a less vague notion; but 'things,' what are they? Is a constellation properly a thing? or an army? or is an *ens rationis* such as space or justice a thing? Is a knife whose handle and blade are changed the 'same'? Is the 'changeling,' whom Locke so seriously discusses, of the human 'kind'? Is 'telepathy' a 'fancy' or a 'fact'? The moment you pass beyond the practical use of these categories (a use usually suggested sufficiently by the circumstances of the special case) to a merely curious or speculative way of thinking, you find it impossible to say within just what limits of fact any one of them shall apply.

The peripatetic philosophy, obeying rationalist propensities, has tried to eternalize the common-sense categories by treating them very technically and articulately. A 'thing' for instance is a being, or *ens*. An *ens* is a subject in which qualities 'inhere.' A subject is a substance. Substances are of kinds, and kinds are definite in number, and discrete. These distinctions are fundamental and eternal. As terms of *discourse* they are indeed magnificently useful, but what they mean, apart from their use in steering our discourse to profitable issues, does not appear. If you ask a scholastic philosopher what a substance may be in itself, apart from its being the support of attributes, he simply says that your intellect knows perfectly what the word means.

But what the intellect knows clearly is only the word itself and its steering function. So it comes about that intellects *sibi permissi*, intellects only curious and idle, have forsaken the common-sense level for what in general terms may be called the 'critical' level of thought. Not merely *such* intellects either—your Humes and Berkeleys and Hegels; but practical observers of facts, your Galileos, Daltons, Faradays, have found it impossible to treat the *naifs* sense-termini of common sense as ultimately real. As common sense interpolates her constant 'things' between our intermittent sensations, so science *extrapolates* her world of 'primary' qualities, her atoms, her ether, her magnetic fields, and the like, beyond the common-sense world. The 'things' are now invisible impalpable things; and the old visible common-sense things are supposed to result from the mixture of these invisibles. Or else the whole *naif* conception of thing gets superseded, and a thing's name is interpreted as denoting only the law or *regel der verbindung* by which certain of our sensations habitually succeed or coexist. Science and critical philosophy thus burst the bounds of common sense. With science *naif* realism ceases: 'Sec-

ondary' qualities become unreal; primary ones alone remain. With critical philosophy, havoc is made of everything. The common-sense categories one and all cease to represent anything in the way of *being*; they are but sublime tricks of human thought, our ways of escaping bewilderment in the midst of sensation's irremediable flow.

But the scientific tendency in critical thought, tho inspired at first by purely intellectual motives, has opened an entirely unexpected range of practical utilities to our astonished view. Galileo gave us accurate clocks and accurate artillery-practice; the chemists flood us with new medicines and dye-stuffs; Ampère and Faraday have endowed us with the New York subway and with Marconi telegrams. The hypothetical things that such men have invented, defined as they have defined them, are showing an extraordinary fertility in consequences verifiable by sense. Our logic can deduce from them a consequence due under certain conditions, we can then bring about the conditions, and presto, the consequence is there before our eyes. The scope of the practical control of nature newly put into our hand by scientific ways of thinking vastly exceeds the scope of the old control grounded on common sense. Its rate of increase accelerates so that no one can trace the limit; one may even fear that the *being* of man may be crushed by his own powers, that his fixed nature as an organism may not prove adequate to stand the strain of the ever increasingly tremendous functions, almost divine creative functions, which his intellect will more and more enable him to wield. He may drown in his wealth like a child in a bath-tub, who has turned on the water and who can not turn it off.

The philosophic stage of criticism, much more thorough in its negations than the scientific stage, so far gives us no new range of practical power. Locke, Hume, Berkeley, Kant, Hegel, have all been utterly sterile, so far as

shedding any light on the details of nature goes, and I can think of no invention or discovery that can be directly traced to anything in their peculiar thought, for neither with Berkeley's tar-water nor with Kant's nebular hypothesis had their respective philosophic tenets anything to do. The satisfactions they yield to their disciples are intellectual, not practical; and even then we have to confess that there is a large minus-side to the account.

There are thus at least three well-characterized levels, stages or types of thought about the world we live in, and the notions of one stage have one kind of merit, those of another stage another kind. It is impossible, however, to say that any stage as yet in sight is absolutely more *true* than any other. Common sense is the more *consolidated* stage, because it got its innings first, and made all language into its ally. Whether it or science be the more *august* stage may be left to private judgment. But neither consolidation nor augustness are decisive marks of truth. If common sense were true, why should science have had to brand the secondary qualities, to which our world owes all its living interest, as false, and to invent an invisible world of points and curves, and mathematical equations instead? Why should it have needed to transform causes and activities into laws of 'functional variation'? Vainly did scholasticism, common sense's college-trained younger sister, seek to stereotype the forms the human family had always talked with, to make them definite and fix them for eternity. Substantial forms (in other words our secondary qualities) hardly outlasted the year of our Lord 1600. People were already tired of them then; and Galileo, and Descartes, with his 'new philosophy,' gave them only a little later their *coup de grâce*.

But now if the new kinds of scientific 'thing,' the corpuscular and etheric world, were essentially more 'true,'

why should they have excited so much criticism within the body of science itself? Scientific logicians are saying on every hand that these entities and their determinations, however definitely conceived, should not be held for literally real. It is *as if* they existed; but in reality they are like co-ordinates or logarithms, only artificial short-cuts for taking us from one part to another of experience's flux. We can cipher fruitfully with them; they serve us wonderfully; but we must not be their dupes.

There is no *ringing* conclusion possible when we compare these types of thinking, with a view to telling which is the more absolutely true. Their naturalness, their intellectual economy, their fruitfulness for practice, all start up as distinct tests of their veracity, and as a result we get confused. Common sense is *better* for one sphere of life, science for another, philosophic criticism for a third; but whether either be *truer* absolutely, Heaven only knows. Just now, if I understand the matter rightly, we are witnessing a curious reversion to the common sense way of looking at physical nature, in the philosophy of science favored by such men as Mach, Ostwald and Duhem. According to these teachers no hypothesis is truer than any other in the sense of being a more literal copy of reality. They are all but ways of talking on our part, to be compared solely from the point of view of their *use*. The only literally true thing is *reality*; and the only reality we know is, for these logicians, sensible reality, the flux of our sensations and emotions as they pass. 'Energy' is the collective name (according to Ostwald) for the sensations just as they present themselves (the movement, heat, magnetic pull, or light, or whatever it may be) when they are measured in certain ways. So measuring them, we are enabled to describe the correlated changes which they show us, in formulas matchless for their simplicity and fruitfulness for human use. They are sovereign triumphs of economy in thought.

No one can fail to admire the 'energetic' philosophy. But the hypersensible entities, the corpuscles and vibrations, hold their own with most physicists and chemists, in spite of its appeal. It seems too economical to be all-sufficient. Profusion, not economy, may after all be reality's key-note.

I am dealing here with highly technical matters, hardly suitable for popular lecturing, and in which my own competence is small. All the better for my conclusion, however, which at this point is this. The whole notion of truth, which naturally and without reflexion we assume to mean the simple duplication by the mind of a ready-made and given reality, proves hard to understand clearly. There is no simple test available for adjudicating off-hand between the divers types of thought that claim to possess it. Common sense, common science or corpuscular philosophy, ultra-critical science, or energetics, and critical or idealistic philosophy, all seem insufficiently true in some regard and leave some dissatisfaction. It is evident that the conflict of these so widely differing systems obliges us to overhaul the very idea of truth, for at present we have no definite notion of what the word may mean. I shall face that task in my next lecture, and will add but a few words, in finishing the present one.

There are only two points that I wish you to retain from the present lecture. The first one relates to common sense. We have seen reason to suspect it, to suspect that in spite of their being so venerable, of their being so universally used and built into the very structure of language, its categories may after all be only a collection of extraordinarily successful hypotheses (historically discovered or invented by single men, but gradually communicated, and used by everybody) by which our forefathers have from time immemorial unified and straightened the discontinuity of their immediate experiences, and

put themselves into an equilibrium with the surface of nature so satisfactory for ordinary practical purposes that it certainly would have lasted forever, but for the excessive intellectual vivacity of Democritus, Archimedes, Galileo, Berkeley, and of other eccentric geniuses whom the example of such men inflamed. Retain, I pray you, this suspicion about common sense.

The other point is this. Ought not the existence of the various types of thinking which we have reviewed, each so splendid for certain purposes, yet all conflicting still, and neither one of them able to support a claim of absolute veracity, to awaken a presumption favorable to the pragmatistic view that all our theories are *instrumental*, are mental modes of *adaption* to reality, rather than revelations or gnostic answers to some divinely instituted world-enigma? I expressed this view as clearly as I could in the second of these lectures. Certainly the restlessness of the actual theoretic situation, the value for some purposes of each thought-level, and the inability of either to expel the others decisively, suggest this pragmatistic view, which I hope that the next lectures may soon make entirely convincing. May there not after all be a possible ambiguity in truth?

SIX: *Pragmatism's Conception of Truth*

PRAGMATISM'S CONCEPTION OF TRUTH

When Clerk-Maxwell was a child it is written that he had a mania for having everything explained to him, and that when people put him off with vague verbal accounts of any phenomenon he would interrupt them impatiently by saying, 'Yes; but I want you to tell me the *particular go* of it!' Had his question been about truth, only a pragmatist could have told him the particular go of it. I believe that our contemporary pragmatists, especially Messrs. Schiller and Dewey, have given the only tenable account of this subject. It is a very ticklish subject, sending subtle rootlets into all kinds of crannies, and hard to treat in the sketchy way that alone befits a public lecture. But the Schiller-Dewey view of truth has been so ferociously attacked by rationalistic philosophers, and so abominably misunderstood, that here, if anywhere, is the point where a clear and simple statement should be made.

I fully expect to see the pragmatist view of truth run through the classic stages of a theory's career. First, you know, a new theory is attacked as absurd; then it is admitted to be true, but obvious and insignificant; finally it is seen to be so important that its adversaries claim

that they themselves discovered it. Our doctrine of truth is at present in the first of these three stages, with symptoms of the second stage having begun in certain quarters. I wish that this lecture might help it beyond the first stage in the eyes of many of you.

Truth, as any dictionary will tell you, is a property of certain of our ideas. It means their 'agreement,' as falsity means their disagreement, with 'reality.' Pragmatists and intellectualists both accept this definition as a matter of course. They begin to quarrel only after the question is raised as to what may precisely be meant by the term 'agreement,' and what by the term 'reality,' when reality is taken as something for our ideas to agree with.

In answering these questions the pragmatists are more analytic and painstaking, the intellectualists more off-hand and irreflective. The popular notion is that a true idea must copy its reality. Like other popular views, this one follows the analogy of the most usual experience. Our true ideas of sensible things do indeed copy them. Shut your eyes and think of yonder clock on the wall, and you get just such a true picture or copy of its dial. But your idea of its 'works' (unless you are a clock-maker) is much less of a copy, yet it passes muster, for it in no way clashes with the reality. Even though it should shrink to the mere word 'works,' that word still serves you truly; and when you speak of the 'time-keeping function' of the clock, or of its spring's 'elasticity,' it is hard to see exactly what your ideas can copy.

You perceive that there is a problem here. Where our ideas cannot copy definitely their object, what does agreement with that object mean? Some idealists seem to say that they are true whenever they are what God means that we ought to think about that object. Others hold the copy-view all through, and speak as if our ideas possessed truth just in proportion as they approach to being copies of the Absolute's eternal way of thinking.

These views, you see, invite pragmatistic discussion. But the great assumption of the intellectualists is that truth means essentially an inert static relation. When you've got your true idea of anything, there's an end of the matter. You're in possession; you *know*; you have fulfilled your thinking destiny. You are where you ought to be mentally; you have obeyed your categorical imperative; and nothing more need follow on that climax of your rational destiny. Epistemologically you are in stable equilibrium.

Pragmatism, on the other hand, asks its usual question. "Grant an idea or belief to be true," it says, "what concrete difference will its being true make in any one's actual life? How will the truth be realized? What experiences will be different from those which would obtain if the belief were false? What, in short, is the truth's cash-value in experiential terms?"

The moment pragmatism asks this question, it sees the answer: *True ideas are those that we can assimilate, validate, corroborate and verify. False ideas are those that we can not.* That is the practical difference it makes to us to have true ideas; that, therefore, is the meaning of truth, for it is all that truth is known-as.

This thesis is what I have to defend. The truth of an idea is not a stagnant property inherent in it. Truth *happens* to an idea. It *becomes* true, is *made* true by events. Its verity is in fact an event, a process: the process namely of its verifying itself, its *verification*. Its validity is the process of its *valid-ation*.

But what do the words verification and validation themselves pragmatically mean? They again signify certain practical consequences of the verified and validated idea. It is hard to find any one phrase that characterizes these consequences better than the ordinary agreement-formula—just such consequences being what we have in mind whenever we say that our ideas 'agree' with real-

ity. They lead us, namely, through the acts and other ideas which they instigate, into or up to, or towards, other parts of experience with which we feel all the while—such feeling being among our potentialities—that the original ideas remain in agreement. The connexions and transitions come to us from point to point as being progressive, harmonious, satisfactory. This function of agreeable leading is what we mean by an idea's verification. Such an account is vague and it sounds at first quite trivial, but it has results which it will take the rest of my hour to explain.

Let me begin by reminding you of the fact that the possession of true thoughts means everywhere the possession of invaluable instruments of action; and that our duty to gain truth, so far from being a blank command from out of the blue, or a 'stunt' self-imposed by our intellect, can account for itself by excellent practical reasons.

The importance to human life of having true beliefs about matters of fact is a thing too notorious. We live in a world of realities that can be infinitely useful or infinitely harmful. Ideas that tell us which of them to expect count as the true ideas in all this primary sphere of verification, and the pursuit of such ideas is a primary human duty. The possession of truth, so far from being here an end in itself, is only a preliminary means towards other vital satisfactions. If I am lost in the woods and starved, and find what looks like a cow-path, it is of the utmost importance that I should think of a human habitation at the end of it, for if I do so and follow it, I save myself. The true thought is useful here because the house which is its object is useful. The practical value of true ideas is thus primarily derived from the practical importance of their objects to us. Their objects are, in-

deed, not important at all times. I may on another occasion have no use for the house; and then my idea of it, however verifiable, will be practically irrelevant, and had better remain latent. Yet since almost any object may some day become temporarily important, the advantage of having a general stock of *extra* truths, of ideas that shall be true of merely possible situations, is obvious. We store such extra truths away in our memories, and with the overflow we fill our books of reference. Whenever such an extra truth becomes practically relevant to one of our emergencies, it passes from cold-storage to do work in the world, and our belief in it grows active. You can say of it then either that 'it is useful because it is true' or that 'it is true because it is useful.' Both these phrases mean exactly the same thing, namely that here is an idea that gets fulfilled and can be verified. True is the name for whatever idea starts the verification-process, useful is the name for its completed function in experience. True ideas would never have been singled out as such, would never have acquired a class-name, least of all a name suggesting value, unless they had been useful from the outset in this way.

From this simple cue pragmatism gets her general notion of truth as something essentially bound up with the way in which one moment in our experience may lead us towards other moments which it will be worth while to have been led to. Primarily, and on the common-sense level, the truth of a state of mind means this function of *a leading that is worth while*. When a moment in our experience, of any kind whatever, inspires us with a thought that is true, that means that sooner or later we dip by that thought's guidance into the particulars of experience again and make advantageous connexion with them. This is a vague enough statement, but I beg you to retain it, for it is essential.

Our experience meanwhile is all shot through with regularities. One bit of it can warn us to get ready for another bit, can 'intend' or be 'significant of' that remoter object. The object's advent is the significance's verification. Truth, in these cases, meaning nothing but eventual verification, is manifestly incompatible with waywardness on our part. Woe to him whose beliefs play fast and loose with the order which realities follow in his experience; they will lead him nowhere or else make false connexions.

By 'realities' or 'objects' here, we mean either things of common sense, sensibly present, or else common-sense relations, such as dates, places, distances, kinds, activities. Following our mental image of a house along the cow-path, we actually come to see the house; we get the image's full verification. *Such simply and fully verified leadings are certainly the originals and prototypes of the truth-process.* Experience offers indeed other forms of truth-process, but they are all conceivable as being primary verifications arrested, multiplied or substituted one for another.

Take, for instance, yonder object on the wall. You and I consider it to be a 'clock,' altho no one of us has seen the hidden works that make it one. We let our notion pass for true without attempting to verify. If truths mean verification-process essentially, ought we then to call such unverified truths as this abortive? No, for they form the overwhelmingly large number of the truths we live by. Indirect as well as direct verifications pass muster. Where circumstantial evidence is sufficient, we can go without eye-witnessing. Just as we here assume Japan to exist without ever having been there, because it *works* to do so, everything we know conspiring with the belief, and nothing interfering, so we assume that thing to be a clock. We *use* it as a clock, regulating the length of our lecture by it. The verifica-

tion of the assumption here means its leading to no frustration or contradiction. Verifiability of wheels and weights and pendulum is as good as verification. For one truth-process completed there are a million in our lives that function in this state of nascency. They turn us *towards* direct verification; lead us into the *surroundings* of the objects they envisage; and then, if everything runs on harmoniously, we are so sure that verification is possible that we omit it, and are usually justified by all that happens.

Truth lives, in fact, for the most part on a credit system. Our thoughts and beliefs 'pass,' so long as nothing challenges them, just as bank-notes pass so long as nobody refuses them. But this all points to direct face-to-face verifications somewhere, without which the fabric of truth collapses like a financial system with no cash-basis whatever. You accept my verification of one thing, I yours of another. We trade on each other's truth. But beliefs verified concretely by *somebody* are the posts of the whole superstructure.

Another great reason—beside economy of time—for waiving complete verification in the usual business of life is that all things exist in kinds and not singly. Our world is found once for all to have that peculiarity. So that when we have once directly verified our ideas about one specimen of a kind, we consider ourselves free to apply them to other specimens without verification. A mind that habitually discerns the kind of thing before it, and acts by the law of the kind immediately, without pausing to verify, will be a 'true' mind in ninety-nine out of a hundred emergencies, proved so by its conduct fitting everything it meets, and getting no refutation.

Indirectly or only potentially verifying processes may thus be true as well as full verification-processes. They work as true processes would work, give us the same

advantages, and claim our recognition for the same reasons. All this on the common-sense level of matters of fact, which we are alone considering.

But matters of fact are not our only stock in trade. *Relations among purely mental ideas* form another sphere where true and false beliefs obtain, and here the beliefs are absolute, or unconditional. When they are true they bear the name either of definitions or of principles. It is either a principle or a definition that 1 and 1 make 2, that 2 and 1 make 3; and so on; that white differs less from gray than it does from black; that when the cause begins to act the effect also commences. Such propositions hold of all possible 'ones,' of all conceivable 'whites' and 'grays' and 'causes.' The objects here are mental objects. Their relations are perceptually obvious at a glance, and no sense-verification is necessary. Moreover, once true, always true, of those same mental objects. Truth here has an 'eternal' character. If you can find a concrete thing anywhere that is 'one' or 'white' or 'gray' or an 'effect,' then your principles will everlastingly apply to it. It is but a case of ascertaining the kind, and then applying the law of its kind to the particular object. You are sure to get truth if you can but name the kind rightly, for your mental relations hold good of everything of that kind without exception. If you then, nevertheless, failed to get truth concretely, you would say that you had classed your real objects wrongly.

In this realm of mental relations, truth again is an affair of leading. We relate one abstract idea with another, framing in the end great systems of logical and mathematical truth, under the respective terms of which the sensible facts of experience eventually arrange themselves, so that our eternal truths hold good of realities also. This marriage of fact and theory is endlessly fertile.

What we say is here already true in advance of special verification, *if we have subsumed our objects rightly*. Our ready-made ideal framework for all sorts of possible objects follows from the very structure of our thinking. We can no more play fast and loose with these abstract relations than we can do so with our sense-experiences. They coerce us; we must treat them consistently, whether or not we like the results. The rules of addition apply to our debts as rigorously as to our assets. The hundredth decimal of π , the ratio of the circumference to its diameter, is predetermined ideally now, tho no one may have computed it. If we should ever need the figure in our dealings with an actual circle we should need to have it given rightly, calculated by the usual rules; for it is the same kind of truth that those rules elsewhere calculate.

Between the coercions of the sensible order and those of the ideal order, our mind is thus wedged tightly. Our ideas must agree with realities, be such realities concrete or abstract, be they facts or be they principles, under penalty of endless inconsistency and frustration.

So far, intellectualists can raise no protest. They can only say that we have barely touched the skin of the matter.

Realities mean, then, either concrete facts, or abstract kinds of thing and relations perceived intuitively between them. They furthermore and thirdly mean, as things that new ideas of ours must no less take account of, the whole body of other truths already in our possession. But what now does 'agreement' with such threefold realities mean?—to use again the definition that is current.

Here it is that pragmatism and intellectualism begin to part company. Primarily, no doubt, to agree means to copy, but we saw that the mere word 'clock' would do

instead of a mental picture of its works, and that of many realities our ideas can only be symbols and not copies. 'Past time,' 'power,' 'spontaneity,'—how can our mind copy such realities?

To 'agree' in the widest sense with a reality *can only mean to be guided either straight up to it or into its surroundings, or to be put into such working touch with it as to handle either it or something connected with it better than if we disagreed.* Better either intellectually or practically! And often agreement will only mean the negative fact that nothing contradictory from the quarter of that reality comes to interfere with the way in which our ideas guide us elsewhere. To copy a reality is, indeed, one very important way of agreeing with it, but it is far from being essential. The essential thing is the process of being guided. Any idea that helps us to *deal*, whether practically or intellectually, with either the reality or its belongings, that doesn't entangle our progress in frustrations, that *fits*, in fact, and adapts our life to the reality's whole setting, will agree sufficiently to meet the requirement. It will hold true of that reality.

Thus, *names* are just as 'true' or 'false' as definite mental pictures are. They set up similar verification-processes, and lead to fully equivalent practical results.

All human thinking gets discursified; we exchange ideas; we lend and borrow verifications, get them from one another by means of social intercourse. All truth thus gets verbally built out, stored up, and made available for every one. Hence, we must *talk* consistently just as we must *think* consistently: for both in talk and thought we deal with kinds. Names are arbitrary, but once understood they must be kept to. We mustn't now call Abel 'Cain' or Cain 'Abel.' If we do, we ungear ourselves from the whole book of Genesis, and from all its connexions with the universe of speech and fact down to the present time. We throw ourselves out of whatever

truth that entire system of speech and fact may embody.

The overwhelming majority of our true ideas admit of no direct or face-to-face verification—those of past history, for example, as of Cain and Abel. The stream of time can be remounted only verbally, or verified indirectly by the present prolongations or effects of what the past harbored. Yet if they agree with these verbalities and effects, we can know that our ideas of the past are true. *As true as past time itself was*, so true was Julius Caesar, so true were antediluvian monsters, all in their proper dates and settings. That past time itself was, is guaranteed by its coherence with everything that's present. True as the present *is*, the past *was* also.

Agreement thus turns out to be essentially an affair of leading—leading that is useful because it is into quarters that contain objects that are important. True ideas lead us into useful verbal and conceptual quarters as well as directly up to useful sensible termini. They lead to consistency, stability and flowing human intercourse. They lead away from eccentricity and isolation, from foiled and barren thinking. The untrammelled flowing of the leading-process, its general freedom from clash and contradiction, passes for its indirect verification; but all roads lead to Rome, and in the end and eventually, all true processes must lead to the face of directly verifying sensible experiences *somewhere*, which somebody's ideas have copied.

Such is the large loose way in which the pragmatist interprets the word agreement. He treats it altogether practically. He lets it cover any process of conduction from a present idea to a future terminus, provided only it run prosperously. It is only thus that 'scientific' ideas, flying as they do beyond common sense, can be said to agree with their realities. It is, as I have already said, *as if* reality were made of ether, atoms or electrons, but we mustn't think so literally. The term 'energy' doesn't

even pretend to stand for anything 'objective.' It is only a way of measuring the surface of phenomena so as to string their changes on a simple formula.

Yet in the choice of these man-made formulas we can not be capricious with impunity any more than we can be capricious on the common-sense practical level. We must find a theory that will *work*; and that means something extremely difficult; for our theory must mediate between all previous truths and certain new experiences. It must derange common sense and previous belief as little as possible, and it must lead to some sensible terminus or other that can be verified exactly. To 'work' means both these things; and the squeeze is so tight that there is little loose play for any hypothesis. Our theories are wedged and controlled as nothing else is. Yet sometimes alternative theoretic formulas are equally compatible with all the truths we know, and then we choose between them for subjective reasons. We choose the kind of theory to which we are already partial; we follow 'elegance' or 'economy.' Clerk-Maxwell somewhere says it would be 'poor scientific taste' to choose the more complicated of two equally well-evidenced conceptions; and you will all agree with him. Truth in science is what gives us the maximum possible sum of satisfactions, taste included, but consistency both with previous truth and with novel fact is always the most imperious claimant.

I have led you through a very sandy desert. But now, if I may be allowed so vulgar an expression, we begin to taste the milk in the cocoanut. Our rationalist critics here discharge their batteries upon us, and to reply to them will take us out from all this dryness into full sight of a momentous philosophical alternative.

Our account of truth is an account of truths in the plural, of processes of leading, realized *in rebus*, and

having only this quality in common, that they *pay*. They pay by guiding us into or towards some part of a system that dips at numerous points into sense-percepts, which we may copy mentally or not, but with which at any rate we are now in the kind of commerce vaguely designated as verification. Truth for us is simply a collective name for verification-processes, just as health, wealth, strength, etc., are names for other processes connected with life, and also pursued because it pays to pursue them. Truth is *made*, just as health, wealth and strength are made, in the course of experience.

Here rationalism is instantaneously up in arms against us. I can imagine a rationalist to talk as follows:

"Truth is not made," he will say; "it absolutely obtains, being a unique relation that does not wait upon any process, but shoots straight over the head of experience, and hits its reality every time. Our belief that yon thing on the wall is a clock is true already, altho no one in the whole history of the world should verify it. The bare quality of standing in that transcendent relation is what makes any thought true that possesses it, whether or not there be verification. You pragmatists put the cart before the horse in making truth's being reside in verification-processes. These are merely signs of its being, merely our lame ways of ascertaining after the fact, which of our ideas already has possessed the wondrous quality. The quality itself is timeless, like all essences and natures. Thoughts partake of it directly, as they partake of falsity or of irrelevancy. It can't be analyzed away into pragmatic consequences."

The whole plausibility of this rationalist tirade is due to the fact to which we have already paid so much attention. In our world, namely, abounding as it does in things of similar kinds and similarly associated, one verification serves for others of its kind, and one great use of knowing things is to be led not so much to them

as to their associates, especially to human talk about them. The quality of truth, obtaining *ante rem*, pragmatically means, then, the fact that in such a world innumerable ideas work better by their indirect or possible than by their direct and actual verification. Truth *ante rem* means only verifiability, then; or else it is a case of the stock rationalist trick of treating the *name* of a concrete phenomenal reality as an independent prior entity, and placing it behind the reality as its explanation. Professor Mach quotes somewhere an epigram of Lessing's:

*Sagt Hänschen Schlau zu Vetter Fritz,
"Wie kommt es, Vetter Fritzzen,
Dass grad' die Reichsten in der Welt,
Das meiste Geld besitzen?"*

Hänschen Schlau here treats the principle 'wealth' as something distinct from the facts denoted by the man's being rich. It antedates them; the facts become only a sort of secondary coincidence with the rich man's essential nature.

In the case of 'wealth' we all see the fallacy. We know that wealth is but a name for concrete processes that certain men's lives play a part in, and not a natural excellence found in Messrs. Rockefeller and Carnegie, but not in the rest of us.

Like wealth, health also lives *in rebus*. It is a name for processes, as digestion, circulation, sleep, etc., that go on happily, tho in this instance we are more inclined to think of it as a principle and to say the man digests and sleeps so well *because* he is so healthy.

With 'strength' we are, I think, more rationalistic still, and decidedly inclined to treat it as an excellence pre-existing in the man and explanatory of the herculean performances of his muscles.

With 'truth' most people go over the border entirely,

and treat the rationalistic account as self-evident. But really all these words in *th* are exactly similar. Truth exists *ante rem* just as much and as little as the other things do.

The scholastics, following Aristotle, made much of the distinction between habit and act. Health in *actu* means, among other things, good sleeping and digesting. But a healthy man need not always be sleeping, or always digesting, any more than a wealthy man need be always handling money, or a strong man always lifting weights. All such qualities sink to the status of 'habits' between their times of exercise; and similarly truth becomes a habit of certain of our ideas and beliefs in their intervals of rest from their verifying activities. But those activities are the root of the whole matter, and the condition of there being any habit to exist in the intervals.

'The true,' to put it very briefly, is only the expedient in the way of our thinking, just as 'the right' is only the expedient in the way of our behaving. Expedient in almost any fashion; and expedient in the long run and on the whole of course; for what meets expediently all the experience in sight won't necessarily meet all farther experiences equally satisfactorily. Experience, as we know, has ways of *boiling over*, and making us correct our present formulas.

The 'absolutely' true, meaning what no farther experience will ever alter, is that ideal vanishing-point towards which we imagine that all our temporary truths will some day converge. It runs on all fours with the perfectly wise man, and with the absolutely complete experience; and, if these ideals are ever realized, they will all be realized together. Meanwhile we have to live to-day by what truth we can get to-day, and be ready to-morrow to call it falsehood. Ptolemaic astronomy, euclidean space, aristotelian logic, scholastic meta-

physics, were expedient for centuries, but human experience has boiled over those limits, and we now call these things only relatively true, or true within those borders of experience. 'Absolutely' they are false; for we know that those limits were casual, and might have been transcended by past theorists just as they are by present thinkers.

When new experiences lead to retrospective judgments, using the past tense, what these judgments utter *was* true, even tho no past thinker had been led there. We live forwards, a Danish thinker has said, but we understand backwards. The present sheds a backward light on the world's previous processes. They may have been truth-processes for the actors in them. They are not so for one who knows the later revelations of the story.

This regulative notion of a potential better truth to be established later, possibly to be established some day absolutely, and having powers of retroactive legislation, turns its face, like all pragmatist notions, towards concreteness of fact, and towards the future. Like the half-truths, the absolute truth will have to be *made*, made as a relation incidental to the growth of a mass of verification-experience, to which the half-true ideas are all along contributing their quota.

I have already insisted on the fact that truth is made largely out of previous truths. Men's beliefs at any time are so much experience *funded*. But the beliefs are themselves parts of the sum total of the world's experience, and become matter, therefore, for the next day's funding operations. So far as reality means experienceable reality, both it and the truths men gain about it are everlastingly in process of mutation—mutation towards a definite goal, it may be—but still mutation.

Mathematicians can solve problems with two variables. On the Newtonian theory, for instance, acceleration varies with distance, but distance also varies with

acceleration. In the realm of truth-processes facts come independently and determine our beliefs provisionally. But these beliefs make us act, and as fast as they do so, they bring into sight or into existence new facts which re-determine the beliefs accordingly. So the whole coil and ball of truth, as it rolls up, is the product of a double influence. Truths emerge from facts; but they dip forward into facts again and add to them; which facts again create or reveal new truth (the word is indifferent) and so on indefinitely. The 'facts' themselves meanwhile are not *true*. They simply *are*. Truth is the function of the beliefs that start and terminate among them.

The case is like a snowball's growth, due as it is to the distribution of the snow on the one hand, and to the successive pushes of the boys on the other, with these factors co-determining each other incessantly.

The most fateful point of difference between being a rationalist and being a pragmatist is now fully in sight. Experience is in mutation, and our psychological ascertainties of truth are in mutation—so much rationalism will allow; but never that either reality itself or truth itself is mutable. Reality stands complete and ready-made from all eternity, rationalism insists, and the agreement of our ideas with it is that unique unanalyzable virtue in them of which she has already told us. As that intrinsic excellence, their truth has nothing to do with our experiences. It adds nothing to the content of experience. It makes no difference to reality itself; it is supervenient, inert, static, a reflexion merely. It doesn't *exist*, it *holds* or *obtains*, it belongs to another dimension from that of either facts or fact-relations, belongs, in short, to the epistemological dimension—and with that big word rationalism closes the discussion.

Thus, just as pragmatism faces forward to the future,

so does rationalism here again face backward to a past eternity. True to her inveterate habit, rationalism reverts to 'principles,' and thinks that when an abstraction once is named, we own an oracular solution.

The tremendous pregnancy in the way of consequences for life of this radical difference of outlook will only become apparent in my later lectures. I wish meanwhile to close this lecture by showing that rationalism's sublimity does not save it from inanity.

When, namely, you ask rationalists, instead of accusing pragmatism of desecrating the notion of truth, to define it themselves by saying exactly what *they* understand by it, the only positive attempts I can think of are these two:

1. "Truth is the system of propositions which have an unconditional claim to be recognized as valid."¹
2. Truth is a name for all those judgments which we find ourselves under obligation to make by a kind of imperative duty.²

The first thing that strikes one in such definitions is their unutterable triviality. They are absolutely true, of course, but absolutely insignificant until you handle them pragmatically. What do you mean by 'claim' here, and what do you mean by 'duty'? As summary names for the concrete reasons why thinking in true ways is overwhelmingly expedient and good for mortal men, it is all right to talk of claims on reality's part to be agreed with, and of obligations on our part to agree. We feel both the claims and the obligations, and we feel them for just those reasons.

But the rationalists who talk of claim and obligation *expressly say that they have nothing to do with our practical interests or personal reasons*. Our reasons for agreeing are psychological facts, they say, relative to

each thinker, and to the accidents of his life. They are his evidence merely, they are no part of the life of truth itself. That life transacts itself in a purely logical or epistemological, as distinguished from a psychological, dimension, and its claims antedate and exceed all personal motivations whatsoever. Tho neither man nor God should ever ascertain truth, the word would still have to be defined as that which *ought* to be ascertained and recognized.

There never was a more exquisite example of an idea abstracted from the concretes of experience and then used to oppose and negate what it was abstracted from.

Philosophy and common life abound in similar instances. The 'sentimentalist fallacy' is to shed tears over abstract justice and generosity, beauty, etc., and never to know these qualities when you meet them in the street, because the circumstances make them vulgar. Thus I read in the privately printed biography of an eminently rationalistic mind: "It was strange that with such admiration for beauty in the abstract, my brother had no enthusiasm for fine architecture, for beautiful painting, or for flowers." And in almost the last philosophic work I have read, I find such passages as the following: "Justice is ideal, solely ideal. Reason conceives that it ought to exist, but experience shows that it can not. . . . Truth, which ought to be, can not be. . . . Reason is deformed by experience. As soon as reason enters experience it becomes contrary to reason."

The rationalist's fallacy here is exactly like the sentimentalist's. Both extract a quality from the muddy particulars of experience, and find it so pure when extracted that they contrast it with each and all its muddy instances as an opposite and higher nature. All the while it is *their* nature. It is the nature of truths to be validated, verified. It pays for our ideas to be validated. Our obliga-

tion to seek truth is part of our general obligation to do what pays. The payments true ideas bring are the sole why of our duty to follow them. Identical whys exist in the case of wealth and health.

Truth makes no other kind of claim and imposes no other kind of ought than health and wealth do. All these claims are conditional; the concrete benefits we gain are what we mean by calling the pursuit a duty. In the case of truth, untrue beliefs work as perniciously in the long run as true beliefs work beneficially. Talking abstractly, the quality 'true' may thus be said to grow absolutely precious and the quality 'untrue' absolutely damnable: the one may be called good, the other bad, unconditionally. We ought to think the true, we ought to shun the false, imperatively.

But if we treat all this abstraction literally and oppose it to its mother soil in experience, see what a preposterous position we work ourselves into.

We can not then take a step forward in our actual thinking. When shall I acknowledge this truth and when that? Shall the acknowledgment be loud?—or silent? If sometimes loud, sometimes silent, which *now*? When may a truth go into cold-storage in the encyclopedia? and when shall it come out for battle? Must I constantly be repeating the truth 'twice two are four' because of its eternal claim on recognition? or is it sometimes irrelevant? Must my thoughts dwell night and day on my personal sins and blemishes, because I truly have them?—or may I sink and ignore them in order to be a decent social unit, and not a mass of morbid melancholy and apology?

It is quite evident that our obligation to acknowledge truth, so far from being unconditional, is tremendously conditioned. Truth with a big T, and in the singular, claims abstractly to be recognized, of course; but concrete truths in the plural need be recognized only when

their recognition is expedient. A truth must always be preferred to a falsehood when both relate to the situation; but when neither does, truth is as little of a duty as falsehood. If you ask me what o'clock it is and I tell you that I live at 95 Irving Street, my answer may indeed be true, but you don't see why it is my duty to give it. A false address would be as much to the purpose.

With this admission that there are conditions that limit the application of the abstract imperative, *the pragmatistic treatment of truth sweeps back upon us in its fulness*. Our duty to agree with reality is seen to be grounded in a perfect jungle of concrete expediencies.

When Berkeley had explained what people meant by matter, people thought that he denied matter's existence. When Messrs. Schiller and Dewey now explain what people mean by truth, they are accused of denying *its* existence. These pragmatists destroy all objective standards, critics say, and put foolishness and wisdom on one level. A favorite formula for describing Mr. Schiller's doctrines and mine is that we are persons who think that by saying whatever you find it pleasant to say and calling it truth you fulfil every pragmatistic requirement.

I leave it to you to judge whether this be not an impudent slander. Pent in, as the pragmatist more than any one else sees himself to be, between the whole body of funded truths squeezed from the past and the coercions of the world of sense about him, who so well as he feels the immense pressure of objective control under which our minds perform their operations? If any one imagines that this law is lax, let him keep its commandment one day, says Emerson. We have heard much of late of the uses of the imagination in science. It is high time to urge the use of a little imagination in philosophy. The unwillingness of some of our critics to read any but the silliest of possible meanings into our statements is as discreditable to their imaginations as

anything I know in recent philosophic history. Schiller says the true is that which 'works.' Thereupon he is treated as one who limits verification to the lowest material utilities. Dewey says truth is what gives 'satisfaction.' He is treated as one who believes in calling everything true which, if it were true, would be pleasant.

Our critics certainly need more imagination of realities. I have honestly tried to stretch my own imagination and to read the best possible meaning into the rationalist conception, but I have to confess that it still completely baffles me. The notion of a reality calling on us to 'agree' with it, and that for no reasons, but simply because its claim is 'unconditional' or 'transcendent,' is one that I can make neither head nor tail of. I try to imagine myself as the sole reality in the world, and then to imagine what more I would 'claim' if I were allowed to. If you suggest the possibility of my claiming that a mind should come into being from out of the void inane and stand and *copy* me, I can indeed imagine what the copying might mean, but I can conjure up no motive. What good it would do me to be copied, or what good it would do that mind to copy me, if further consequences are expressly and in principle ruled out as motives for the claim (as they are by our rationalist authorities) I can not fathom. When the Irishman's admirers ran him along to the place of banquet in a sedan chair with no bottom, he said, "Faith, if it wasn't for the honor of the thing, I might as well have come on foot." So here: but for the honor of the thing, I might as well have remained uncopied. Copying is one genuine mode of knowing (which for some strange reason our contemporary transcendentalists seem to be tumbling over each other to repudiate); but when we get beyond copying, and fall back on unnamed forms of agreeing that are expressly denied to be either copyings or leadings or fittings, or any other processes pragmat-

ically definable, the *what* of the 'agreement' claimed becomes as unintelligible as the *why* of it. Neither content nor motive can be imagined for it. It is an absolutely meaningless abstraction.³

Surely in this field of truth it is the pragmatists and not the rationalists who are the more genuine defenders of the universe's rationality.

SEVEN: *Pragmatism and Humanism*

acteristic of the enthusiasm of a certain stage of youth! At twenty-one we rise to such a challenge and expect to find the system. It never occurs to most of us even later that the question 'what is *the* truth?' is no real question (being irrelative to all conditions) and that the whole notion of *the* truth is an abstraction from the fact of truths in the plural, a mere useful summarizing phrase like *the* Latin Language or *the* Law.

Common-law judges sometimes talk about the law, and schoolmasters talk about the latin tongue, in a way to make their hearers think they mean entities pre-existent to the decisions or to the words and syntax, determining them unequivocally and requiring them to obey. But the slightest exercise of reflexion makes us see that, instead of being principles of this kind, both law and latin are results. Distinctions between the lawful and the unlawful in conduct, or between the correct and incorrect in speech, have grown up incidentally among the interactions of men's experiences in detail; and in no other way do distinctions between the true and the false in belief ever grow up. Truth grafts itself on previous truth, modifying it in the process, just as idiom grafts itself on previous idiom, and law on previous law. Given previous law and a novel case, and the judge will twist them into fresh law. Previous idiom; new slang or metaphor or oddity that hits the public taste;—and presto, a new idiom is made. Previous truth; fresh facts:—and our mind finds a new truth.

All the while, however, we pretend that the eternal is unrolling, that the one previous justice, grammar or truth are simply fulgurating and not being made. But imagine a youth in the courtroom trying cases with his abstract notion of 'the' law, or a censor of speech let loose among the theatres with his idea of 'the' mother-tongue, or a professor setting up to lecture on the actual universe with his rationalistic notion of 'the Truth' with

a big T, and what progress do they make? Truth, law, and language fairly boil away from them at the least touch of novel fact. These things *make themselves* as we go. Our rights, wrongs, prohibitions, penalties, words, forms, idioms, beliefs, are so many new creations that add themselves as fast as history proceeds. Far from being antecedent principles that animate the process, law, language, truth are but abstract names for its results.

Laws and languages at any rate are thus seen to be man-made things. Mr. Schiller applies the analogy to beliefs, and proposes the name of 'Humanism' for the doctrine that to an unascertainable extent our truths are man-made products too. Human motives sharpen all our questions, human satisfactions lurk in all our answers, all our formulas have a human twist. This element is so inextricable in the products that Mr. Schiller sometimes seems almost to leave it an open question whether there be anything else. "The world," he says, "is essentially $\lambda\eta$, it is what we make it. It is fruitless to define it by what it originally was or by what it is apart from us; it is what is made of it. Hence . . . the world is plastic." ¹ He adds that we can learn the limits of the plasticity only by trying, and that we ought to start as if it were wholly plastic, acting methodically on that assumption, and stopping only when we are decisively rebuked.

This is Mr. Schiller's butt-end-foremost statement of the humanist position, and it has exposed him to severe attack. I mean to defend the humanist position in this lecture, so I will insinuate a few remarks at this point.

Mr. Schiller admits as emphatically as any one the presence of resisting factors in every actual experience of truth-making, of which the new-made special truth must take account, and with which it has perforce to 'agree.' All our truths are beliefs about 'Reality'; and in any particular belief the reality acts as something in-

dependent, as a thing *found*, not manufactured. Let me here recall a bit of my last lecture.

'Reality' is in general *what truths have to take account of*,² and the *first* part of reality from this point of view is the flux of our sensations. Sensations are forced upon us, coming we know not whence. Over their nature, order and quantity we have as good as no control. *They* are neither true nor false; they simply *are*. It is only what we say about them, only the names we give them, our theories of their source and nature and remote relations, that may be true or not.

The *second* part of reality, as something that our beliefs must also obediently take account of is the *relations* that obtain between our sensations or between their copies in our minds. This part falls into two sub-parts: 1) the relations that are mutable and accidental, as those of date and place; and 2) those that are fixed and essential because they are grounded on the inner natures of their terms. Both sorts of relation are matters of immediate perception. Both are 'facts.' But it is the latter kind of fact that forms the more important sub-part of reality for our theories of knowledge. Inner relations namely are 'eternal,' are perceived whenever their sensible terms are compared; and of them our thought—mathematical and logical thought so-called—must eternally take account.

The *third* part of reality, additional to these perceptions (tho largely based upon them), is the *previous truths* of which every new inquiry takes account. This third part is a much less obdurately resisting factor: it often ends by giving way. In speaking of these three portions of reality as at all times controlling our belief's formation, I am only reminding you of what we heard in our last hour.

Now however fixed these elements of reality may be, we still have a certain freedom in our dealings with

them. Take our sensations. That they are is undoubtedly beyond our control; but which we attend to, note, and make emphatic in our conclusions depends on our own interests; and, according as we lay the emphasis here or there, quite different formulations of truth result. We read the same facts differently. 'Waterloo,' with the same fixed details, spells a 'victory' for an Englishman; for a Frenchman it spells a 'defeat.' So, for an optimist philosopher the universe spells victory, for a pessimist, defeat.

What we say about reality thus depends on the perspective into which we throw it. The *that* of it is its own; but the *what* depends on the *which*; and the *which* depends on *us*. Both the sensational and the relational parts of reality are dumb; they say absolutely nothing about themselves. We it is who have to speak for them. This dumbness of sensations has led such intellectualists as T. H. Green and Edward Caird to shove them almost beyond the pale of philosophic recognition, but pragmatists refuse to go so far. A sensation is rather like a client who has given his case to a lawyer and then has passively to listen in the courtroom to whatever account of his affairs, pleasant or unpleasant, the lawyer finds it most expedient to give.

Hence, even in the field of sensation, our minds exert a certain arbitrary choice. By our inclusions and omissions we trace the field's extent; by our emphasis we mark its foreground and its background; by our order we read it in this direction or in that. We receive in short the block of marble, but we carve the statue ourselves.

This applies to the 'eternal' parts of reality as well: we shuffle our perceptions of intrinsic relation and arrange them just as freely. We read them in one serial order or another, class them in this way or in that, treat one or the other as more fundamental, until our beliefs about them form those bodies of truth known as logics, geometrics, or arithmetics, in each and all of which the

form and order in which the whole is cast is flagrantly man-made.

Thus, to say nothing of the new *facts* which men add to the matter of reality by the acts of their own lives, they have already impressed their mental forms on that whole third of reality which I have called 'previous truths.' Every hour brings its new percepts, its own facts of sensation and relation, to be truly taken account of; but the whole of our *past* dealings with such facts is already funded in the previous truths. It is therefore only the smallest and recentest fraction of the first two parts of reality that comes to us without the human touch, and that fraction has immediately to become humanized in the sense of being squared, assimilated, or in some way adapted, to the humanized mass already there. As a matter of fact we can hardly take in an impression at all, in the absence of a preconception of what impressions there may possibly be.

When we talk of reality 'independent' of human thinking, then, it seems a thing very hard to find. It reduces to the notion of what is just entering into experience and yet to be named, or else to some imagined aboriginal presence in experience, before any belief about the presence had arisen, before any human conception had been applied. It is what is absolutely dumb and evanescent, the merely ideal limit of our minds. We may glimpse it, but we never grasp it; what we grasp is always some substitute for it which previous human thinking has peptonized and cooked for our consumption. If so vulgar an expression were allowed us, we might say that wherever we find it, it has been already *faked*. This is what Mr. Schiller has in mind when he calls independent reality a mere unresisting *ύλη*, which is only to be made over by us.

That is Mr. Schiller's belief about the sensible core of reality. We 'encounter' it (in Mr. Bradley's words) but

don't possess it. Superficially this sounds like Kant's view; but between categories fulminated before nature began, and categories gradually forming themselves in nature's presence, the whole chasm between rationalism and empiricism yawns. To the genuine 'Kantianer' Schiller will always be to Kant as a satyr to Hyperion.

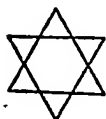
Other pragmatists may reach more positive beliefs about the sensible core of reality. They may think to get at it in its independent nature, by peeling off the successive man-made wrappings. They may make theories that tell us where it comes from and all about it; and *if these theories work satisfactorily they will be true*. The transcendental idealists say there is no core, the finally completed wrapping being reality and truth in one. Scholasticism still teaches that the core is 'matter.' Professor Bergson, Heymans, Strong, and others believe in the core and bravely try to define it. Messrs. Dewey and Schiller treat it as a 'limit.' Which is the truer of all these diverse accounts, or of others comparable with them, unless it be the one that finally proves the most satisfactory? On the one hand there will stand reality, on the other an account of it which it proves impossible to better or to alter. If the impossibility prove permanent, the truth of the account will be absolute. Other content of truth than this I can find nowhere. If the anti-pragmatists have any other meaning, let them for heaven's sake reveal it, let them grant us access to it!

Not being reality, but only our belief about reality, it will contain human elements, but these will know the non-human element, in the only sense in which there can be knowledge of anything. Does the river make its banks, or do the banks make the river? Does a man walk with his right leg or with his left leg more essentially? Just as impossible may it be to separate the real from the human factors in the growth of our cognitive experience.

Let this stand as a first brief indication of the humanistic position. Does it seem paradoxical? If so, I will try to make it plausible by a few illustrations, which will lead to a fuller acquaintance with the subject.

In many familiar objects every one will recognize the human element. We conceive a given reality in this way or in that, to suit our purpose, and the reality passively submits to the conception. You can take the number 27 as the cube of 3, or as the product of 3 and 9, or as 26 *plus* 1, or 100 *minus* 73, or in countless other ways, of which one will be just as true as another. You can take a chess-board as black squares on a white ground, or as white squares on a black ground, and neither conception is a false one.

You can treat the adjoined figure as a star, as two big triangles crossing each other, as a hexagon with legs set up on its angles, as six equal triangles hanging together by their tips, etc. All these treatments are true treatments—the sensible *that* upon the paper resists no one of them. You can say of a line that it runs east, or you can say that it runs west, and the line *per se* accepts both descriptions without rebelling at the inconsistency.



We carve out groups of stars in the heavens, and call them constellations, and the stars patiently suffer us to do so,—though if they knew what we were doing, some of them might feel much surprised at the partners we had given them. We name the same constellation diversely, as Charles's Wain, the Great Bear, or the Dipper. None of the names will be false, and one will be as true as another, for all are applicable.

In all these cases we humanly make an *addition* to some sensible reality, and that reality tolerates the addition. All the additions 'agree' with the reality; they fit it, while they build it out. No one of them is false. Which may be treated as the *more* true, depends alto-

gether on the human use of it. If the 27 is a number of dollars which I find in a drawer where I had left 28, it is 28 minus 1. If it is the number of inches in a board which I wish to insert as a shelf into a cupboard 26 inches wide, it is 26 plus 1. If I wish to ennoble the heavens by the constellations I see there, 'Charles's Wain' would be more true than 'Dipper.' My friend Frederick Myers was humorously indignant that that prodigious star-group should remind us Americans of nothing but a culinary utensil.

What shall we call a *thing* anyhow? It seems quite arbitrary, for we carve out everything, just as we carve out constellations, to suit our human purposes. For me, this whole 'audience' is one thing, which grows now restless, now attentive. I have no use at present for its individual units, so I don't consider them. So of an 'army,' of a 'nation.' But in your own eyes, ladies and gentlemen, to call you 'audience' is an accidental way of taking you. The permanently real things for you are your individual persons. To an anatomist, again, those persons are but organisms, and the real things are the organs. Not the organs, so much as their constituent cells, say the histologists; not the cells, but their molecules, say in turn the chemists.

We break the flux of sensible reality into things, then, at our will. We create the subjects of our true as well as of our false propositions.

We create the predicates also. Many of the predicates of things express only the relations of the things to us and to our feelings. Such predicates of course are human additions. Caesar crossed the Rubicon, and was a menace to Rome's freedom. He is also an American schoolroom pest, made into one by the reaction of our schoolboys on his writings. The added predicate is as true of him as the earlier ones.

You see how naturally one comes to the humanistic

principle: you can't weed out the human contribution. Our nouns and adjectives are all humanized heirlooms, and in the theories we build them into, the inner order and arrangement is wholly dictated by human considerations, intellectual consistency being one of them. Mathematics and logic themselves are fermenting with human rearrangements; physics, astronomy and biology follow massive cues of preference. We plunge forward into the field of fresh experience with the beliefs our ancestors and we have made already; these determine what we notice; what we notice determines what we do; what we do again determines what we experience; so from one thing to another, altho the stubborn fact remains that there is a sensible flux, what is *true of it* seems from first to last to be largely a matter of our own creation.

We build the flux out inevitably. The great question is: does it, with our additions, *rise or fall in value*? Are the additions *worthy or unworthy*? Suppose a universe composed of seven stars, and nothing else but three human witnesses and their critic. One witness names the stars 'Great Bear'; one calls them 'Charles's Wain'; one calls them the 'Dipper.' Which human addition has made the best universe of the given stellar material? If Frederick Myers were the critic, he would have no hesitation in 'turning down' the American witness.

Lotze has in several places made a deep suggestion. We naively assume, he says, a relation between reality and our minds which may be just the opposite of the true one. Reality, we naturally think, stands ready-made and complete, and our intellects supervene with the one simple duty of describing it as it is already. But may not our descriptions, Lotze asks, be themselves important additions to reality? And may not previous reality itself be there, far less for the purpose of reappearing unaltered in our knowledge, than for the very purpose of

stimulating our minds to such additions as shall enhance the universe's total value. '*Die erhöhung des vorgefundenen daseins*' is a phrase used by Professor Eucken somewhere, which reminds one of this suggestion by the great Lotze.

It is identically our pragmatistic conception. In our cognitive as well as in our active life we are creative. We *add*, both to the subject and to the predicate part of reality. The world stands really malleable, waiting to receive its final touches at our hands. Like the kingdom of heaven, it suffers human violence willingly. Man *engenders* truths upon it.

No one can deny that such a rôle would add both to our dignity and to our responsibility as thinkers. To some of us it proves a most inspiring notion. Signore Papini, the leader of Italian pragmatism, grows fairly dithyrambic over the view that it opens of man's divinely-creative functions.

The import of the difference between pragmatism and rationalism is now in sight throughout its whole extent. The essential contrast is that *for rationalism reality is ready-made and complete from all eternity, while for pragmatism it is still in the making, and awaits part of its complexion from the future*. On the one side the universe is absolutely secure, on the other it is still pursuing its adventures.

We have got into rather deep water with this humanistic view, and it is no wonder that misunderstanding gathers round it. It is accused of being a doctrine of caprice. Mr. Bradley, for example, says that a humanist, if he understood his own doctrine, would have to 'hold any end, however perverted, to be rational, if I insist on it personally, and any idea, however mad, to be the truth if only some one is resolved that he will have it so.' The humanist view of 'reality,' as something resisting, yet malleable, which controls our thinking as an

energy that must be taken 'account' of incessantly (the not necessarily merely *copied*) is evidently a difficult one to introduce to novices. The situation reminds me of one that I have personally gone through. I once wrote an essay on our right to believe, which I unluckily called the *Will to Believe*. All the critics, neglecting the essay, pounced upon the title. Psychologically it was impossible, morally it was iniquitous. The 'will to deceive,' the 'will to make-believe,' were wittily proposed as substitutes for it.

The alternative between pragmatism and rationalism, in the shape in which we now have it before us, is no longer a question in the theory of knowledge, it concerns the structure of the universe itself.

On the pragmatist side we have only one edition of the universe, unfinished, growing in all sorts of places, especially in the places where thinking beings are at work.

On the rationalist side we have a universe in many editions, one real one, the infinite folio, or *édition de luxe*, eternally complete; and then the various finite editions, full of false readings, distorted and mutilated each in its own way.

So the rival metaphysical hypotheses of pluralism and monism here come back upon us. I will develop their differences during the remainder of our hour.

And first let me say that it is impossible not to see a temperamental difference at work in the choice of sides. The rationalist mind, radically taken, is of a doctrinaire and authoritative complexion: the phrase '*must be*' is ever on its lips. The bellyband of its universe must be tight. A radical pragmatist on the other hand is a happy-go-lucky anarchistic sort of creature. If he had to live in a tub like Diogenes he wouldn't mind at all if the hoops were loose and the staves let in the sun.

Now the idea of this loose universe affects your

typical rationalists in much the same way as 'freedom of the press' might affect a veteran official in the Russian bureau of censorship; or as 'simplified spelling' might affect an elderly schoolmistress. It affects him as the swarm of protestant sects affects a papist onlooker. It appears as backboneless and devoid of principle as 'opportunism' in politics appears to an old-fashioned French legitimist, or to a fanatical believer in the divine right of the people.

For pluralistic pragmatism, truth grows up inside of all the finite experiences. They lean on each other, but the whole of them, if such a whole there be, leans on nothing. All 'homes' are in finite experience; finite experience as such is homeless. Nothing outside of the flux secures the issue of it. It can hope salvation only from its own intrinsic promises and potencies.

To rationalists this describes a tramp and vagrant world, adrift in space, with neither elephant nor tortoise to plant the sole of its foot upon. It is a set of stars hurled into heaven without even a centre of gravity to pull against. In other spheres of life it is true that we have got used to living in a state of relative insecurity. The authority of 'the State,' and that of an absolute 'moral law,' have resolved themselves into expediencies, and holy church has resolved itself into 'meeting-houses.' Not so as yet within the philosophic classrooms. A universe with such as *us* contributing to create its truth, a world delivered to *our* opportunisms and our private judgments! Home-rule for Ireland would be a millennium in comparison. We're no more fit for such a part than the Filipinos are 'fit for self-government.' Such a world would not be *respectable* philosophically. It is a trunk without a tag, a dog without a collar in the eyes of most professors of philosophy.

What then would tighten this loose universe, according to the professors?

Something to support the finite many, to tie it to, to unify and anchor it. Something *un*-exposed to accident, something eternal and unalterable. The mutable in experience must be founded on immutability. Behind our *de facto* world, our world in act, there must be a *de jure* duplicate fixed and previous, with all that can happen here already there *in posse*, every drop of blood, every smallest item, appointed and provided, stamped and branded, without chance of variation. The negatives that haunt our ideals here below must be themselves negated in the absolutely Real. This alone makes the universe solid. This is the resting deep. We live upon the stormy surface; but with this our anchor holds, for it grapples rocky bottom. This is Wordsworth's 'eternal peace abiding at the heart of endless agitation.' This is Vivekananda's mystic One of which I read to you. This is Reality with the big R, reality that makes the timeless claim, reality to which defeat can't happen. This is what the men of principles, and in general all the men whom I called tender-minded in my first lecture, think themselves obliged to postulate.

And this, exactly this, is what the tough-minded of that lecture find themselves moved to call a piece of perverse abstraction-worship. The tough-minded are the men whose alpha and omega are *facts*. Behind the bare phenomenal facts, as my tough-minded old friend Chauncey Wright, the great Harvard empiricist of my youth, used to say, there is *nothing*. When a rationalist insists that behind the facts there is the *ground* of the facts, the *possibility* of the facts, the tougher empiricists accuse him of taking the mere name and nature of a fact and clapping it behind the fact as a duplicate entity to make it possible. That such sham grounds are often invoked is notorious. At a surgical operation I once heard a bystander ask a doctor why the patient breathed so deeply. 'Because ether is a respiratory stimulant,' the

doctor answered. 'Ahl' said the questioner, as if that were a good explanation. But this is like saying that cyanide of potassium kills because it is a 'poison,' or that it is so cold to-night because it is 'winter,' or that we have five fingers because we are 'pentadactyls.' These are but names for the facts, taken from the facts, and then treated as previous and explanatory. The tender-minded notion of an absolute reality is, according to the radically tough-minded, framed on just this pattern. It is but our summarizing name for the whole spread-out and strung-along mass of phenomena, treated as if it were a different entity, both one and previous.

You see how differently people take things. The world we live in exists diffused and distributed, in the form of an indefinitely numerous lot of *eaches*, coherent in all sorts of ways and degrees; and the tough-minded are perfectly willing to keep them at that valuation. They can *stand* that kind of world, their temper being well adapted to its insecurity. Not so the tender-minded party. They must back the world we find ourselves born into by 'another and a better' world in which the *eaches* form an All and the All a One that logically presupposes, co-implicates, and secures each *each* without exception.

Must we as pragmatists be radically tough-minded? or can we treat the absolute edition of the world as a legitimate hypothesis? It is certainly legitimate, for it is thinkable, whether we take it in its abstract or in its concrete shape.

By taking it abstractly I mean placing it behind our finite life as we place the word 'winter' behind to-night's cold weather. 'Winter' is only the name for a certain number of days which we find generally characterized by cold weather, but it guarantees nothing in that line, for our thermometer to-morrow may soar into the 70's. Nevertheless the word is a useful one to plunge forward with into the stream of our experience. It cuts off certain

probabilities and sets up others. You can put away your straw hats; you can unpack your arctics. It is a summary of things to look for. It names a part of nature's habits, and gets you ready for their continuation. It is a definite instrument abstracted from experience, a conceptual reality that you must take account of, and which reflects you totally back into sensible realities. The pragmatist is the last person to deny the reality of such abstractions. They are so much past experience funded.

But taking the absolute edition of the world concretely means a different hypothesis. Rationalists take it concretely and *oppose* it to the world's finite editions. They give it a particular nature. It is perfect, finished. Everything known there is known along with everything else; here, where ignorance reigns, far otherwise. If there is want there, there also is the satisfaction provided. Here all is process; that world is timeless. Possibilities obtain in our world; in the absolute world, where all that is *not* is from eternity impossible, and all that *is* is necessary; the category of possibility has no application. In this world crimes and horrors are regrettable. In that totalized world regret obtains not, for 'the existence of ill in the temporal order is the very condition of the perfection of the eternal order.'

Once more, either hypothesis is legitimate in pragmatist eyes, for either has its uses. Abstractly, or taken like the word winter, as a memorandum of past experience that orients us towards the future, the notion of the absolute world is indispensable. Concretely taken, it is also indispensable, at least to certain minds, for it determines them religiously, being often a thing to change their lives by, and by changing their lives, to change whatever in the outer order depends on them.

We can not therefore methodically join the tough minds in their rejection of the whole notion of a world beyond our finite experience. One misunderstanding of

pragmatism is to identify it with positivistic tough-mindedness, to suppose that it scorns every rationalistic notion as so much jabber and gesticulation, that it loves intellectual anarchy as such and prefers a sort of wolf-world absolutely unpent and wild and without a master or a collar to any philosophic classroom product whatsoever. I have said so much in these lectures against the over-tender forms of rationalism, that I am prepared for some misunderstanding here, but I confess that the amount of it that I have found in this very audience surprises me, for I have simultaneously defended rationalistic hypotheses, so far as these re-direct you fruitfully into experience.

For instance I receive this morning this question on a post-card: "Is a pragmatist necessarily a complete materialist and agnostic?" One of my oldest friends, who ought to know me better, writes me a letter that accuses the pragmatism I am recommending of shutting out all wider metaphysical views and condemning us to the most *terre-à-terre* naturalism. Let me read you some extracts from it.

"It seems to me," my friend writes, "that the pragmatic objection to pragmatism lies in the fact that it might accentuate the narrowness of narrow minds.

"Your call to the rejection of the namby-pamby and the wishy-washy is of course inspiring. But altho it is salutary and stimulating to be told that one should be responsible for the immediate issues and bearings of his words and thoughts, I decline to be deprived of the pleasure and profit of dwelling also on remoter bearings and issues, and it is the *tendency* of pragmatism to refuse this privilege.

"In short, it seems to me that the limitations, or rather the dangers, of the pragmatic tendency, are analogous to those which beset the unwary followers of the 'natural sciences.' Chemistry and physics are eminently prag-

matic; and many of their devotees, smugly content with the data that their weights and measures furnish, feel an infinite pity and disdain for all students of philosophy and metaphysics whomsoever. And of course everything can be expressed,—after a fashion, and ‘theoretically,’—in terms of chemistry and physics, that is, *everything except the vital principle of the whole*, and that, they say, there is no pragmatic use in trying to express; it has no bearings—for *them*. I for my part refuse to be persuaded that we can not look beyond the obvious pluralism of the naturalist and the pragmatist to a logical unity in which they take no interest.”

How is such a conception of the pragmatism I am advocating possible, after my first and second lectures? I have all along been offering it expressly as a mediator between tough-mindedness and tender-mindedness. If the notion of a world *ante rem*, whether taken abstractly like the word winter, or concretely as the hypothesis of an Absolute, can be shown to have any consequences whatever for our life, it has a meaning. If the meaning works, it will have *some* truth that ought to be held to through all possible reformulations, for pragmatism.

The absolutistic hypothesis, that perfection is eternal, aboriginal, and most real, has a perfectly definite meaning, and it works religiously. To examine how, will be the subject of my next and final lecture.

EIGHT: *Pragmatism and Religion*

PRAGMATISM AND RELIGION

At the close of the last lecture I reminded you of the first one, in which I had opposed tough-mindedness to tender-mindedness and recommended pragmatism as their mediator. Tough-mindedness positively rejects tender-mindedness's hypothesis of an eternal perfect edition of the universe coexisting with our finite experience.

On pragmatic principles we can not reject any hypothesis if consequences useful to life flow from it. Universal conceptions, as things to take account of, may be as real for pragmatism as particular sensations are. They have, indeed, no meaning and no reality if they have no use. But if they have any use they have that amount of meaning. And the meaning will be true if the use squares well with life's other uses.

Well, the use of the Absolute is proved by the whole course of men's religious history. The eternal arms are then beneath. Remember Vivekananda's use of the Atman—not indeed a scientific use, for we can make no particular deductions from it. It is emotional and spiritual altogether.

It is always best to discuss things by the help of concrete examples. Let me read therefore some of those

*There is no endowment in man or woman that is not tal-
lied in you;*

*There is no virtue, no beauty, in man or woman, but as
good is in you;*

*No pluck nor endurance in others, but as good is in you;
No pleasure waiting for others, but an equal pleasure
waits for you.*

*Whoever you are! claim your own at any hazard!
These shows of the east and west are tame, compared
with you;*

*These immense meadows—these interminable rivers—you
are immense and interminable as they;*

*You are he or she who is master or mistress over them,
Master or mistress in your own right over Nature, ele-
ments, pain, passion, dissolution.*

*The hopples fall from your ankles—you find an unfailing
sufficiency;*

*Old or young, male or female, rude, low, rejected by the
rest whatever you are promulges itself;*

*Through birth, life, death, burial, the means are pro-
vided, nothing is scanted;*

*Through angers, losses, ambition, ignorance, ennui, what
you are picks its way.*

Verily a fine and moving poem, in any case, but there are two ways of taking it, both useful.

One is the monistic way, the mystical way of pure cosmic emotion. The glories and grandeurs, they are yours absolutely, even in the midst of your defacements. Whatever may happen to you, whatever you may appear to be, inwardly you are safe. Look back, lie back, on your true principle of being! This is the famous way of quietism, of indifferentism. Its enemies compare it to a

spiritual opium. Yet pragmatism must respect this way, for it has massive historic vindication.

But pragmatism sees another way to be respected also, the pluralistic way of interpreting the poem. The *you* so glorified, to which the hymn is sung, may mean your better possibilities phenomenally taken, or the specific redemptive effects even of your failures, upon yourself or others. It may mean your loyalty to the possibilities of others whom you admire and love so that you are willing to accept your own poor life, for it is that glory's partner. You can at least appreciate, applaud, furnish the audience, of so brave a total world. Forget the low in yourself, then, think only of the high. Identify your life therewith; then, through angers, losses, ignorance, ennui, whatever you thus make yourself, whatever you thus most deeply are, picks its way.

In either way of taking the poem, it encourages fidelity to ourselves. Both ways satisfy; both sanctify the human flux. Both paint the portrait of the *you* on a gold background. But the background of the first way is the static One, while in the second way it means possibles in the plural, genuine possibles, and it has all the restlessness of that conception.

Noble enough is either way of reading the poem; but plainly the pluralistic way agrees with the pragmatic temper best, for it immediately suggests an infinitely larger number of the details of future experience to our mind. It sets definite activities in us at work. Altho this second way seems prosaic and earth-born in comparison with the first way, yet no one can accuse it of tough-mindedness in any brutal sense of the term. Yet if, as pragmatists, you should positively set up the second way *against* the first way, you would very likely be misunderstood. You would be accused of denying nobler conceptions, and of being an ally of tough-mindedness in the worst sense.

You remember the letter from a member of this audience from which I read some extracts at our previous meeting. Let me read you an additional extract now. It shows a vagueness in realizing the alternatives before us which I think is very widespread.

"I believe," writes my friend and correspondent, "in pluralism; I believe that in our search for truth we leap from one floating cake of ice to another, on an infinite sea, and that by each of our acts we make new truths possible and old ones impossible; I believe that each man is responsible for making the universe better, and that if he does not do this it will be in so far left undone.

"Yet at the same time I am willing to endure that my children should be incurably sick and suffering (as they are not) and I myself stupid and yet with brains enough to see my stupidity, only on one condition, namely, that through the construction, in imagination and by reasoning, of a *rational unity of all things*, I can conceive my acts and my thoughts and my troubles as *supplemented by all the other phenomena of the world, and as forming—when thus supplemented—a scheme which I approve and adopt as my own*; and for my part I refuse to be persuaded that we can not look beyond the obvious pluralism of the naturalist and pragmatist to a logical unity in which they take no interest or stock."

Such a fine expression of personal faith warms the heart of the hearer. But how much does it clear his philosophic head? Does the writer consistently favor the monistic, or the pluralistic, interpretation of the world's poem? His troubles become atoned for *when thus supplemented*, he says, supplemented, that is, by all the remedies that *the other phenomena* may supply. Obviously here the writer faces forward into the particulars of experience, which he interprets in a pluralistic-melioristic way.

But he believes himself to face backward. He speaks

of what he calls the rational *unity* of things, when all the while he really means their possible empirical *unification*. He supposes at the same time that the pragmatist, because he criticises rationalism's abstract One, is cut off from the consolation of believing in the saving possibilities of the concrete many. He fails in short to distinguish between taking the world's perfection as a necessary principle, and taking it only as a possible *terminus ad quem*.

I regard the writer of the letter as a genuine pragmatist, but as a pragmatist *sans le savoir*. He appears to me as one of that numerous class of philosophic amateurs whom I spoke of in my first lecture, as wishing to have all the good things going, without being too careful as to how they agree or disagree. 'Rational unity of all things' is so inspiring a formula, that he brandishes it off-hand, and abstractly accuses pluralism of conflicting with it (for the bare names do conflict), altho concretely he means by it just the pragmatistically unified and ameliorated world. Most of us remain in this essential vagueness, and it is well that we should; but in the interest of clearheadedness it is well that some of us should go farther, so I will try now to focus a little more discriminatingly on this particular religious point.

Is then this you of yours, this absolutely real world, this unity that yields the moral inspiration and has the religious value, to be taken monistically or pluralistically? Is it *ante rem* or *in rebus*? Is it a principle or an end, an absolute or an ultimate, a first or a last? Does it make you look forward or lie back? It is certainly worth while not to clump the two things together, for if discriminated, they have decidedly diverse meanings for life.

Please observe that the whole dilemma revolves pragmatically about the notion of the world's possibilities. Intellectually, rationalism invokes its absolute principle

of unity, as a ground of possibility for the many facts. Emotionally, it sees it as a container and limiter of possibilities, a guarantee that the upshot shall be good. Taken in this way, the absolute makes all good things certain, and all bad things impossible (in the eternal, namely), and may be said to transmute the entire category of possibility into categories more secure. One sees at this point that the great religious difference lies between the men who insist that the world *must and shall be*, and those who are contented with believing that the world *may be*, saved. The whole clash of rationalistic and empiricist religion is thus over the validity of possibility. It is necessary therefore to begin by focusing upon that word. What may the word 'possible' definitely mean? To unreflecting men it means a sort of third estate of being, less real than existence, more real than non-existence, a twilight realm, a hybrid status, a limbo into which and out of which realities ever and anon are made to pass.

Such a conception is of course too vague and nondescript to satisfy us. Here, as elsewhere, the only way to extract a term's meaning is to use the pragmatic method on it. When you say that a thing is possible, what difference does it make? It makes at least this difference that if any one calls it impossible you can contradict him, if any one calls it actual you can contradict *him*, and if any one calls it necessary you can contradict him too.

But these privileges of contradiction don't amount to much. When you say a thing is possible, does not that make some farther difference in terms of actual fact?

It makes at least this negative difference that if the statement be true, it follows that *there is nothing extant capable of preventing* the possible thing. The absence of real grounds of interference may thus be said to make things *not impossible*, possible therefore in the *bare* or *abstract* sense.

But most possibles are not bare, they are concretely grounded, or well-grounded, as we say. What does this mean pragmatically? It means not only that there are no preventive conditions present, but that some of the conditions of production of the possible thing actually are here. Thus a concretely possible chicken means: (1) that the idea of chicken contains no essential self-contradiction; (2) that no boys, skunks, or other enemies are about; and (3) that at least an actual egg exists. Possible chicken means actual egg—plus actual sitting hen, or incubator, or what not. As the actual conditions approach completeness the chicken becomes a better-and-better-grounded possibility. When the conditions are entirely complete, it ceases to be a possibility, and turns into an actual fact.

Let us apply this notion to the salvation of the world. What does it pragmatically mean to say that this is possible? It means that some of the conditions of the world's deliverance do actually exist. The more of them there are existent, the fewer preventing conditions you can find, the better-grounded is the salvation's possibility, the more *probable* does the fact of the deliverance become.

So much for our preliminary look at possibility.

Now it would contradict the very spirit of life to say that our minds must be indifferent and neutral in questions like that of the world's salvation. Any one who pretends to be neutral writes himself down here as a fool and a sham. We all do wish to minimize the insecurity of the universe; we are and ought to be unhappy when we regard it as exposed to every enemy and open to every life-destroying draft. Nevertheless there are unhappy men who think the salvation of the world impossible. Theirs is the doctrine known as pessimism.

Optimism in turn would be the doctrine that thinks the world's salvation inevitable.

Midway between the two there stands what may be

called the doctrine of meliorism, tho it has hitherto figured less as a doctrine than as an attitude in human affairs. Optimism has always been the regnant *doctrine* in European philosophy. Pessimism was only recently introduced by Schopenhauer and counts few systematic defenders as yet. Meliorism treats salvation as neither necessary nor impossible. It treats it as a possibility, which becomes more and more of a probability the more numerous the actual conditions of salvation become.

It is clear that pragmatism must incline towards meliorism. Some conditions of the world's salvation are actually extant, and she can not possibly close her eyes to this fact: and should the residual conditions come, salvation would become an accomplished reality. Naturally the terms I use here are exceedingly summary. You may interpret the word 'salvation' in any way you like, and make it as diffuse and distributive, or as climacteric and integral a phenomenon as you please.

Take, for example, any one of us in this room with the ideals which he cherishes and is willing to live and work for. Every such ideal realized will be one moment in the world's salvation. But these particular ideals are not bare abstract possibilities. They are grounded, they are *live* possibilities, for we are their live champions and pledges, and if the complementary conditions come and add themselves, our ideals will become actual things. What now are the complementary conditions? They are first such a mixture of things as will in the fulness of time give us a chance, a gap that we can spring into, and, finally, *our act*.

Does our act then *create* the world's salvation so far as it makes room for itself, so far as it leaps into the gap? Does it create, not the whole world's salvation of course, but just so much of this as itself covers of the world's extent?

Here I take the bull by the horns, and in spite of the

whole crew of rationalists and monists, of whatever brand they be, I ask *why not?* Our acts, our turning-places, where we seem to ourselves to make ourselves and grow, are the parts of the world to which we are closest, the parts of which our knowledge is the most intimate and complete. Why should we not take them at their face-value? Why may they not be the actual turning-places and growing-places which they seem to be, of the world—why not the workshop of being, where we catch fact in the making, so that nowhere may the world grow in any other kind of way than this?

Irrationally we are told. How can new being come in local spots and patches which add themselves or stay away at random, independently of the rest? There must be a reason for our acts, and where in the last resort can any reason be looked for save in the material pressure or the logical compulsion of the total nature of the world? There can be but one real agent of growth, or seeming growth, anywhere, and that agent is the integral world itself. It may grow all-over, if growth there be, but that single parts should grow *per se* is irrational.

But if one talks of rationality—and of reasons for things, and insists that they can't just come in spots, what *kind* of a reason can there ultimately be why anything should come at all? Talk of logic and necessity and categories and the absolute and the contents of the whole philosophical machine-shop as you will, the only *real* reason I can think of why anything should ever come is that *some one wishes it to be here*. It is *demanded*,—demanded, it may be, to give relief to no matter how small a fraction of the world's mass. This is *living reason*, and compared with it material causes and logical necessities are spectral things.

In short the only fully rational world would be the world of wishing-caps, the world of telepathy, where every desire is fulfilled instantaneously, without having to con-

sider or placate surrounding or intermediate powers. This is the Absolute's own world. He calls upon the phenomenal world to be, and it *is*, exactly as he calls for it, no other condition being required. In our world, the wishes of the individual are only one condition. Other individuals are there with other wishes and they must be propitiated first. So Being grows under all sorts of resistances in this world of the many, and, from compromise to compromise, only gets organized gradually into what may be called secondarily rational shape. We approach the wishing-cap type of organization only in a few departments of life. We want water and we turn a faucet. We want a kodak-picture and we press a button. We want information and we telephone. We want to travel and we buy a ticket. In these and similar cases, we hardly need to do more than the wishing—the world is rationally organized to do the rest.

But this talk of rationality is a parenthesis and a digression. What we were discussing was the idea of a world growing not integrally but piecemeal by the contributions of its several parts. Take the hypothesis seriously and as a live one. Suppose that the world's author put the case to you before creation, saying: "I am going to make a world not certain to be saved, a world the perfection of which shall be conditional merely, the condition being that each several agent does its own 'level best.' I offer you the chance of taking part in such a world. Its safety, you see, is unwarranted. It is a real adventure, with real danger, yet it may win through. It is a social scheme of co-operative work genuinely to be done. Will you join the procession? Will you trust yourself and trust the other agents enough to face the risk?"

Should you in all seriousness, if participation in such a world were proposed to you, feel bound to reject it as not safe enough? Would you say that, rather than be part and parcel of so fundamentally pluralistic and irra-

tional a universe, you preferred to relapse into the slumber of nonentity from which you had been momentarily aroused by the tempter's voice?

Of course if you are normally constituted, you would do nothing of the sort. There is a healthy-minded buoyancy in most of us which such a universe would exactly fit. We would therefore accept the offer—"Topf und schlag auf schlag!" It would be just like the world we practically live in; and loyalty to our old nurse Nature would forbid us to say no. The world proposed would seem 'rational' to us in the most living way.

Most of us, I say, would therefore welcome the proposition and add our *fiat* to the *fiat* of the creator. Yet perhaps some would not; for there are morbid minds in every human collection, and to them the prospect of a universe with only a fighting chance of safety would probably make no appeal. There are moments of discouragement in us all, when we are sick of self and tired of vainly striving. Our own life breaks down, and we fall into the attitude of the prodigal son. We mistrust the chances of things. We want a universe where we can just give up, fall on our father's neck, and be absorbed into the absolute life as a drop of water melts into the river or the sea.

The peace and rest, the security desiderated at such moments is security against the bewildering accidents of so much finite experience. Nirvana means safety from this everlasting round of adventures of which the world of sense consists. The hindoo and the buddhist, for this is essentially their attitude, are simply afraid, afraid of more experience, afraid of life.

And to men of this complexion, religious monism comes with its consoling words: "All is needed and essential—even you with your sick soul and heart. All are one with God, and with God all is well. The everlasting arms are beneath, whether in the world of finite ap-

pearance you seem to fail or to succeed." There can be no doubt that when men are reduced to their last sick extremity absolutism is the only saving scheme. Pluralistic moralism simply makes their teeth chatter, it refrigerates the very heart within their breast.

So we see concretely two types of religion in sharp contrast. Using our old terms of comparison, we may say that the absolutistic scheme appeals to the tender-minded while the pluralistic scheme appeals to the tough. Many persons would refuse to call the pluralistic scheme religious at all. They would call it moralistic, and would apply the word religious to the monistic scheme alone. Religion in the sense of self-surrender, and moralism in the sense of self-sufficingness, have been pitted against each other as incompatibles frequently enough in the history of human thought.

We stand here before the final question of philosophy. I said in my fourth lecture that I believed the monistic-pluralistic alternative to be the deepest and most pregnant question that our minds can frame. Can it be that the disjunction is a final one? that only one side can be true? Are a pluralism and monism genuine incompatibles? So that, if the world were really pluralistically constituted, if it really existed distributively and were made up of a lot of eaches, it could only be saved piecemeal and *de facto* as the result of their behavior, and its epic history in no wise short-circuited by some essential oneness in which the severalness were already 'taken up' beforehand and eternally 'overcome'? If this were so, we should have to choose one philosophy or the other. We could not say 'yes, yes' to both alternatives. There would have to be a 'no' in our relations with the possible. We should confess an ultimate disappointment: we could not remain healthy-minded and sick-minded in one indivisible act.

Of course as human beings we can be healthy minds

on one day and sick souls on the next; and as amateur dabblers in philosophy we may perhaps be allowed to call ourselves monistic pluralists, or free-will determinists, or whatever else may occur to us of a reconciling kind. But as philosophers aiming at clearness and consistency, and feeling the pragmatistic need of squaring truth with truth, the question is forced upon us of frankly adopting either the tender or the robustious type of thought. In particular *this* query has always come home to me: May not the claims of tender-mindedness go too far? May not the notion of a world already saved *in toto* anyhow, be too saccharine to stand? May not religious optimism be too idyllic? Must *all* be saved? Is *no* price to be paid in the work of salvation? Is the last word sweet? Is all 'yes, yes' in the universe? Doesn't the fact of 'no' stand at the very core of life? Doesn't the very 'seriousness' that we attribute to life mean that ineluctable noes and losses form a part of it, that there are genuine sacrifices somewhere, and that something permanently drastic and bitter always remains at the bottom of its cup?

I can not speak officially as a pragmatist here; all I can say is that my own pragmatism offers no objection to my taking sides with this more moralistic view, and giving up the claim of total reconciliation. The possibility of this is involved in the pragmatistic willingness to treat pluralism as a serious hypothesis. In the end it is our faith and not our logic that decides such questions, and I deny the right of any pretended logic to veto my own faith. I find myself willing to take the universe to be really dangerous and adventurous, without therefore backing out and crying 'no play.' I am willing to think that the prodigal-son attitude, open to us as it is in many vicissitudes, is not the right and final attitude towards the whole of life. I am willing that there should be real losses and real losers, and no total preservation of all

that is. I can believe in the ideal as an ultimate, not as an origin, and as an extract, not the whole. When the cup is poured off, the dregs are left behind for ever, but the possibility of what is poured off is sweet enough to accept.

As a matter of fact countless human imaginations live in this moralistic and epic kind of a universe, and find its disseminated and strung-along successes sufficient for their rational needs. There is a finely translated epigram in the Greek anthology which admirably expresses this state of mind, this acceptance of loss as unatoned for, even though the lost element might be one's self:

*"A shipwrecked sailor, buried on this coast,
Bids you set sail.
Full many a gallant bark, when we were lost,
Weathered the gale."*

Those puritans who answered 'yes' to the question: Are you willing to be damned for God's glory? were in this objective and magnanimous condition of mind. The way of escape from evil on this system is *not* by getting it 'aufgehoben,' or preserved in the whole as an element essential but 'overcome.' *It is by dropping it out altogether, throwing it overboard and getting beyond it, helping to make a universe that shall forget its very place and name.*

It is then perfectly possible to accept sincerely a drastic kind of a universe from which the element of 'seriousness' is not to be expelled. Whoso does so is, it seems to me, a genuine pragmatist. He is willing to live on a scheme of uncertified possibilities which he trusts; willing to pay with his own person, if need be, for the realization of the ideals which he frames.

What now actually *are* the other forces which he trusts to co-operate with him, in a universe of such a type? They are at least his fellow men, in the stage of being

which our actual universe has reached. But are there not superhuman forces also, such as religious men of the pluralistic type we have been considering have always believed in? Their words may have sounded monistic when they said "there is no God but God"; but the original polytheism of mankind has only imperfectly and vaguely sublimated itself into monotheism, and monotheism itself, so far as it was religious and not a scheme of classroom instruction for the metaphysicians, has always viewed God as but one helper, *primus inter pares*, in the midst of all the shapers of the great world's fate.

I fear that my previous lectures, confined as they have been to human and humanistic aspects, may have left the impression on many of you that pragmatism means methodically to leave the superhuman out. I have shown small respect indeed for the Absolute, and I have until this moment spoken of no other superhuman hypothesis but that. But I trust that you see sufficiently that the Absolute has nothing but its superhumanness in common with the theistic God. On pragmatistic principles, if the hypothesis of God works satisfactorily in the widest sense of the word, it is true. Now whatever its residual difficulties may be, experience shows that it certainly does work, and that the problem is to build it out and determine it so that it will combine satisfactorily with all the other working truths. I can not start upon a whole theology at the end of this last lecture; but when I tell you that I have written a book on men's religious experience, which on the whole has been regarded as making for the reality of God, you will perhaps exempt my own pragmatism from the charge of being an atheistic system. I firmly disbelieve, myself, that our human experience is the highest form of experience extant in the universe. I believe rather that we stand in much the same relation to the whole of the universe as our canine and feline pets do to the whole of human life. They inhabit our

drawing-rooms and libraries. They take part in scenes of whose significance they have no inkling. They are merely tangent to curves of history the beginnings and ends and forms of which pass wholly beyond their ken. So we are tangent to the wider life of things. But, just as many of the dog's and cat's ideals coincide with our ideals, and the dogs and cats have daily living proof of the fact, so we may well believe, on the proofs that religious experience affords, that higher powers exist and are at work to save the world on ideal lines similar to our own.

You see that pragmatism can be called religious, if you allow that religion can be pluralistic or merely melioristic in type. But whether you will finally put up with that type of religion or not is a question that only you yourself can decide. Pragmatism has to postpone dogmatic answer, for we do not yet know certainly which type of religion is going to work best in the long run. The various overbeliefs of men, their several faith-ventures, are in fact what are needed to bring the evidence in. You will probably make your own ventures severally. If radically tough, the hurly-burly of the sensible facts of nature will be enough for you, and you will need no religion at all. If radically tender, you will take up with the more monistic form of religion: the pluralistic form, with its reliance on possibilities that are not necessities, will not seem to afford you security enough.

But if you are neither tough nor tender in an extreme and radical sense, but mixed as most of us are, it may seem to you that the type of pluralistic and moralistic religion that I have offered is as good a religious synthesis as you are likely to find. Between the two extremes of crude naturalism on the one hand and transcendental absolutism on the other, you may find that what I take the liberty of calling the pragmatistic or melioristic type of theism is exactly what you require.

AUTHOR'S PREFACE TO THE MEANING OF TRUTH

The pivotal part of my book named *Pragmatism* is its account of the relation called 'truth' which may obtain between an idea (opinion, belief, statement, or what not) and its object. 'Truth,' I there say, 'is a property of certain of our ideas. It means their agreement, as falsity means their disagreement, with reality. Pragmatists and intellectualists both accept this definition as a matter of course.

'Where our ideas [do] not copy definitely their object, what does agreement with that object mean? . . . Pragmatism asks its usual question. "Grant an idea or belief to be true," it says, "what concrete difference will its being true make in any one's actual life? What experiences [may] be different from those which would obtain if the belief were false? How will the truth be realized? What, in short, is the truth's cash-value in experiential terms?" The moment pragmatism asks this question, it sees the answer: *True ideas are those that we can assimilate, validate, corroborate, and verify. False ideas are those that we cannot.* That is the practical difference it makes to us to have true ideas; that therefore is the meaning of truth, for it is all that truth is known as.

'The truth of an idea is not a stagnant property inherent in it. Truth *happens* to an idea. It *becomes* true, is *made* true by events. Its verity is in fact an event, a process, the process namely of its verifying itself, its *verification*. Its validity is the process of its *validation*.¹

To agree in the widest sense with a reality can only mean to be guided either straight up to it or into its surroundings, or to be put into such working touch with it as to handle either it or something connected with it better than if we disagreed. Better either intellectually or practically. . . . Any idea that helps us to deal, whether practically or intellectually, with either the reality or its belongings, that doesn't entangle our progress in frustrations, that *fits*, in fact, and adapts our life to the reality's whole setting, will agree sufficiently to meet the requirement. It will be true of that reality.

'The true, to put it very briefly, is *only the expedient in the way of our thinking, just as the right is only the expedient in the way of our behaving*. Expedient in almost any fashion, and expedient in the long run and on the whole, of course; for what meets expediently all the experience in sight won't necessarily meet all farther experiences equally satisfactorily. Experience, as we know, has ways of *boiling over*, and making us correct our present formulas.'

This account of truth, following upon the similar ones given by Messrs. Dewey and Schiller, has occasioned the liveliest discussion. Few critics have defended it, most of them have scouted it. It seems evident that the subject is a hard one to understand, under its apparent simplicity; and evident also, I think, that the definitive settlement of it will mark a turning-point in the history of epistemology, and consequently in that of general philosophy. In order to make my own thought more accessible to those who hereafter may have to study the question, I have collected in the volume that follows all the work of my pen that

bears directly on the truth-question. My first statement was in 1884, in the article that begins the present volume. The other papers follow in the order of their publication. Two or three appear now for the first time.

One of the accusations which I oftenest have had to meet is that of making the truth of our religious beliefs consist in their 'feeling good' to us, and in nothing else. I regret to have given some excuse for this charge, by the unguarded language in which, in the book *Pragmatism*, I spoke of the truth of the belief of certain philosophers in the absolute. Explaining why I do not believe in the absolute myself (p. 78), yet finding that it may secure 'moral holidays' to those who need them, and is true in so far forth (if to gain moral holidays be a good),² I offered this as a conciliatory olive-branch to my enemies. But they, as is only too common with such offerings, trampled the gift under foot and turned and rent the giver. I had counted too much on their good will—oh for the rarity of christian charity under the sun! Oh for the rarity of ordinary secular intelligence also! I had supposed it to be matter of common observation that, of two competing views of the universe which in all other respects are equal, but of which the first denies some vital human need while the second satisfies it, the second will be favoured by sane men for the simple reason that it makes the world seem more rational. To choose the first view under such circumstances would be an ascetic act, an act of philosophic self-denial of which no normal human being would be guilty. Using the pragmatic test of the meaning of concepts, I had shown the concept of the absolute to *mean* nothing but the holiday giver, the banisher of cosmic fear. One's objective deliverance, when one says 'the absolute exists,' amounted, on my showing, just to this, that 'some justification of a feeling of security in presence of the universe,' exists, and that systematically to refuse to cultivate a feeling of

security would be to do violence to a tendency in one's emotional life which might well be respected as prophetic.

Apparently my absolutist critics fail to see the workings of their own minds in any such picture, so all that I can do is to apologize, and take my offering back. The absolute is true in *no* way then, and least of all, by the verdict of the critics, in the way which I assigned!

My treatment of 'God,' 'freedom,' and 'design' was similar. Reducing, by the pragmatic test, the meaning of each of these concepts to its positive experienceable operation, I showed them all to mean the same thing, viz., the presence of 'promise' in the world. 'God or no God?' means 'promise or no promise?' It seems to me that the alternative is objective enough, being a question as to whether the cosmos has one character or another, even though our own provisional answer be made on subjective grounds. Nevertheless christian and non-christian critics alike accuse me of summoning people to say 'God exists,' *even when he doesn't exist*, because forsooth in my philosophy the 'truth' of the saying doesn't really mean that he exists in any shape whatever, but only that to say so feels good.

Most of the pragmatist and anti-pragmatist warfare is over what the word 'truth' shall be held to signify, and not over any of the facts embodied in truth-situations; for both pragmatists and anti-pragmatists believe in existent objects, just as they believe in our ideas of them. The difference is that when the pragmatists speak of truth, they mean exclusively something about the ideas, namely their workableness; whereas when anti-pragmatists speak of truth they seem most often to mean something about the objects. Since the pragmatist, if he agrees that an idea is 'really' true, also agrees to whatever it says about its object; and since most anti-pragmatists have already come round to agreeing that,

if the object exists, the idea that it does so is workable; there would seem so little left to fight about that I might well be asked why instead of reprinting my share in so much verbal wrangling, I do not show my sense of 'values' by burning it all up.

I understand the question and I will give my answer. I am interested in another doctrine in philosophy to which I give the name of radical empiricism, and it seems to me that the establishment of the pragmatist theory of truth is a step of first-rate importance in making radical empiricism prevail. Radical empiricism consists first of a postulate, next of a statement of fact, and finally of a generalized conclusion.

The postulate is that the only things that shall be debatable among philosophers shall be things definable in terms drawn from experience. [Things of an unexperienceable nature may exist *ad libitum*, but they form no part of the material for philosophic debate.]

The statement of fact is that the relations between things, conjunctive as well as disjunctive, are just as much matters of direct particular experience, neither more so nor less so, than the things themselves.

The generalized conclusion is that therefore the parts of experience hold together from next to next by relations that are themselves parts of experience. The directly apprehended universe needs, in short, no extraneous trans-empirical connective support, but possesses in its own right a concatenated or continuous structure.

The great obstacle to radical empiricism in the contemporary mind is the rooted rationalist belief that experience as immediately given is all disjunction and no conjunction, and that to make one world out of this separateness, a higher unifying agency must be there. In the prevalent idealism this agency is represented as the absolute all-witness which 'relates' things together by throwing 'categories' over them like a net. The most pe-

cular and unique, perhaps, of all these categories is supposed to be the truth-relation, which connects parts of reality in pairs, making of one of them a knower, and of the other a thing known, yet which is itself contentless experientially, neither describable, explicable, nor reduceable to lower terms, and denotable only by uttering the name 'truth.'

The pragmatist view, on the contrary, of the truth-relation is that it has a definite content, and that everything in it is experienceable. Its whole nature can be told in positive terms. The 'workableness' which ideas must have, in order to be true, means particular workings, physical or intellectual, actual or possible, which they may set up from next to next inside of concrete experience. Were this pragmatic contention admitted, one great point in the victory of radical empiricism would also be scored, for the relation between an object and the idea that truly knows it, is held by rationalists to be nothing of this describable sort, but to stand outside of all possible temporal experience; and on the relation, so interpreted, rationalism is wonted to make its last most obdurate rally.

Now the anti-pragmatist contentions which I try to meet in this volume can be so easily used by rationalists as weapons of resistance, not only to pragmatism but to radical empiricism also (for if the truth-relation were transcendent, others might be so too), that I feel strongly the strategical importance of having them definitely met and got out of the way. What our critics most persistently keep saying is that though workings go with truth, yet they do not constitute it. It is numerically additional to them, prior to them, explanatory of them, and in no wise to be explained *by* them, we are incessantly told. The first point for our enemies to establish, therefore, is that *something* numerically additional and

prior to the workings is involved in the truth of an idea. Since the *object* is additional, and usually prior, most rationalists plead *it*, and boldly accuse us of denying it. This leaves on the bystanders the impression—since we cannot reasonably deny the existence of the object—that our account of truth breaks down, and that our critics have driven us from the field. Altho in various places in this volume I try to refute the slanderous charge that we deny real existence, I will say here again, for the sake of emphasis, that the existence of the object, whenever the idea asserts it 'truly,' is the only reason, in innumerable cases, why the idea does work successfully, if it work at all; and that it seems an abuse of language, to say the least, to transfer the word 'truth' from the idea to the object's existence, when the falsehood of ideas that won't work is explained by that existence as well as the truth of those that will.

I find this abuse prevailing among my most accomplished adversaries. But once establish the proper verbal custom, let the word 'truth' represent a property of the idea, cease to make it something mysteriously connected with the object known, and the path opens fair and wide, as I believe, to the discussion of radical empiricism on its merits. The truth of an idea will then mean only its workings, or that in it which by ordinary psychological laws sets up those workings; it will mean neither the idea's object, nor anything 'saltatory' inside the idea, that terms drawn from experience cannot describe.

One word more, ere I end this preface. A distinction is sometimes made between Dewey, Schiller and myself, as if I, in supposing the object's existence, made a concession to popular prejudice which they, as more radical pragmatists, refuse to make. As I myself understand these authors, we all three absolutely agree in admitting the transcendency of the object (provided it be an ex-

perienceable object) to the subject, in the truth-relation. Dewey in particular has insisted almost ad nauseam that the whole meaning of our cognitive states and processes lies in the way they intervene in the control and revaluation of independent existences or facts. His account of knowledge is not only absurd, but meaningless, unless independent existences be there of which our ideas take account, and for the transformation of which they work. But because he and Schiller refuse to discuss objects and relations 'transcendent' in the sense of being *altogether trans-experiential*, their critics pounce on sentences in their writings to that effect to show that they deny the existence *within the realm of experience* of objects external to the ideas that declare their presence there.³ It seems incredible that educated and apparently sincere critics should so fail to catch their adversary's point of view.

What misleads so many of them is possibly also the fact that the universes of discourse of Schiller, Dewey, and myself are panoramas of different extent, and that what the one postulates explicitly the other provisionally leaves only in a state of implication, while the reader thereupon considers it to be denied. Schiller's universe is the smallest, being essentially a psychological one. He starts with but one sort of thing, truth-claims, but is led ultimately to the independent objective facts which they assert, inasmuch as the most successfully validated of all claims is that such facts are there. My universe is more essentially epistemological. I start with two things, the objective facts and the claims, and indicate which claims, the facts being there, will work successfully as the latter's substitutes and which will not. I call the former claims true. Dewey's panorama, if I understand this colleague, is the widest of the three, but I refrain from giving my own account of its complexity. Suffice it that he holds as firmly as I do to objects independent of

our judgments. If I am wrong in saying this, he must correct me. I decline in this matter to be corrected at second hand.

I have not pretended in the following pages to consider all the critics of my account of truth, such as Messrs. Taylor, Lovejoy, Gardiner, Bakewell, Creighton, Hibben, Pãrodi, Salter, Carus, Lalande, Mentré, McTaggart, G. E. Moore, Ladd and others, especially not Professor Schinz, who has published under the title of *Anti-pragmatisme* an amusing sociological romance. Some of these critics seem to me to labor under an inability almost pathetic, to understand the thesis which they seek to refute. I imagine that most of their difficulties have been answered by anticipation elsewhere in this volume, and I am sure that my readers will thank me for not adding more repetition to the fearful amount that is already there.

95 IRVING ST., CAMBRIDGE (MASS.),
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THE FUNCTION OF COGNITION¹

The following inquiry is (to use a distinction familiar to readers of Mr. Shadworth Hodgson) not an inquiry into the 'how it comes,' but into the 'what it is' of cognition. What we call acts of cognition are evidently realized through what we call brains and their events, whether there be 'souls' dynamically connected with the brains or not. But with neither brains nor souls has this essay any business to transact. In it we shall simply assume that cognition is produced, somehow, and limit ourselves to asking what elements it contains, what factors it implies.

Cognition is a function of consciousness. The first factor it implies is therefore a state of consciousness wherein the cognition shall take place. Having elsewhere used the word 'feeling' to designate generically all states of consciousness considered subjectively, or without respect to their possible function, I shall then say that, whatever elements an act of cognition may imply besides, it at least implies the existence of a *feeling*. [If the reader share the current antipathy to the word 'feeling,' he may substitute for it, wherever I use it, the word 'idea,' taken in the old broad Lockian sense, or he may use the clumsy phrase 'state of consciousness,' or finally he may say 'thought' instead.]

Now it is to be observed that the common consent of mankind has agreed that some feelings are cognitive and some are simple facts having a subjective, or, what one might almost call a physical, existence, but no such self-transcendent function as would be implied in their being pieces of knowledge. Our task is again limited here. We are not to ask, 'How is self-transcendence possible?' We are only to ask, 'How comes it that common sense has assigned a number of cases in which it is assumed not only to be possible but actual? And what are the marks used by common sense to distinguish those cases from the rest?' In short, our inquiry is a chapter in descriptive psychology,—hardly anything more.

Condillac embarked on a quest similar to this by his famous hypothesis of a statue to which various feelings were successively imparted. Its first feeling was supposed to be one of fragrance. But to avoid all possible complication with the question of genesis, let us not attribute even to a statue the possession of our imaginary feeling. Let us rather suppose it attached to no matter, nor localized at any point in space, but left swinging *in vacuo*, as it were, by the direct creative *fiat* of a god. And let us also, to escape entanglement with difficulties about the physical or psychical nature of its 'object,' not call it a feeling of fragrance or of any other determinate sort, but limit ourselves to assuming that it is a feeling of *q*. What is true of it under this abstract name will be no less true of it in any more particular shape (such as fragrance, pain, hardness) which the reader may suppose.

Now, if this feeling of *q* be the only creation of the god, it will of course form the entire universe. And if, to escape the cavils of that large class of persons who believe that *semper idem sentire ac non sentire* are the same,² we allow the feeling to be of as short a duration as they like, that universe will only need to last an infinitesimal part of a second. The feeling in question

will thus be reduced to its fighting weight, and all that befalls it in the way of a cognitive function must be held to befall in the brief instant of its quickly snuffed-out life,—a life, it will also be noticed, that has no other moment of consciousness either preceding or following it.

Well now, can our little feeling, thus left alone in the universe,—for the god and we psychological critics may be supposed left out of the account,—can the feeling, I say, be said to have any sort of a cognitive function? For it to *know*, there must be something to be known. What is there, on the present supposition? One may reply, 'the feeling's content *q*.' But does it not seem more proper to call this the feeling's *quality* than its content? Does not the word 'content' suggest that the feeling has already dirempted itself as an act from its content as an object? And would it be quite safe to assume so promptly that the quality *q* of a feeling is one and the same thing with a feeling of the quality *q*? The quality *q*, so far, is an entirely subjective fact which the feeling carries so to speak endogenously, or in its pocket. If any one pleases to dignify so simple a fact as this by the name of knowledge, of course nothing can prevent him. But let us keep closer to the path of common usage, and reserve the name knowledge for the cognition of 'realities,' meaning by realities things that exist independently of the feeling through which their cognition occurs. If the content of the feeling occur nowhere in the universe outside of the feeling itself, and perish with the feeling, common usage refuses to call it a reality, and brands it as a subjective feature of the feeling's constitution, or at the most as the feeling's *dream*.

For the feeling to be cognitive in the specific sense, then, it must be self-transcendent; and we must prevail upon the god to *create a reality outside of it* to correspond to its intrinsic quality *q*. Thus only can it be redeemed from the condition of being a solipsism. If now

the new-created reality *resemble* the feeling's quality *q*. I say that the feeling may be held by us *to be cognizant of that reality*.

This first instalment of my thesis is sure to be attacked. But one word before defending it. 'Reality' has become our warrant for calling a feeling cognitive; but what becomes our warrant for calling anything reality? The only reply is—the faith of the present critic or inquirer. At every moment of his life he finds himself subject to a belief in *some* realities, even though his realities of this year should prove to be his illusions of the next. Whenever he finds that the feeling he is studying contemplates what he himself regards as a reality, he must of course admit the feeling itself to be truly cognitive. We are ourselves the critics here; and we shall find our burden much lightened by being allowed to take reality in this relative and provisional way. Every science must make some assumptions. *Erkenntnisstheoretiker* are but fallible mortals. When they study the function of cognition, they do it by means of the same function in themselves. And knowing that the fountain cannot be higher than its source, we should promptly confess that our results in this field are affected by our own liability to err. *The most we can claim is, that what we say about cognition may be counted as true as what we say about anything else*. If our hearers agree with us about what are to be held 'realities,' they will perhaps also agree to the reality of our doctrine of the way in which they are known. We cannot ask for more.

Our terminology shall follow the spirit of these remarks. We will deny the function of knowledge to any feeling whose quality or content we do not ourselves believe to exist outside of that feeling as well as in it. We may call such a feeling a dream if we like; we shall have to see later whether we can call it a fiction or an error.

To revert now to our thesis. Some persons will immediately cry out, 'How *can* a reality resemble a feeling?' Here we find how wise we were to name the quality of the feeling by an algebraic letter *q*. We flank the whole difficulty of resemblance between an inner state and an outward reality, by leaving it free to any one to postulate as the reality whatever sort of thing he thinks *can* resemble a feeling,—if not an outward thing, then another feeling like the first one,—the mere feeling *q* in the critic's mind for example. Evading thus this objection, we turn to another which is sure to be urged.

It will come from those philosophers to whom 'thought,' in the sense of a knowledge of relations, is the all in all of mental life; and who hold a merely feeling consciousness to be no better—one would sometimes say from their utterances, a good deal worse—than no consciousness at all. Such phrases as these, for example, are common to-day in the mouths of those who claim to walk in the footprints of Kant and Hegel rather than in the ancestral English paths: 'A perception detached from all others, "left out of the heap we call a mind," being out of all relation, has no qualities—is simply nothing. We can no more consider it than we can see vacancy.' 'It is simply in itself fleeting, momentary, unnameable (because while we name it it has become another), and for the very same reason unknowable, the very negation of knowability.' 'Exclude from what we have considered real all qualities constituted by relation, we find that none are left.'

Altho such citations as these from the writings of Professor Green might be multiplied almost indefinitely, they would hardly repay the pains of collection, so egregiously false is the doctrine they teach. Our little supposed feeling, whatever it may be, from the cognitive point of view, whether a bit of knowledge or a dream, is certainly no psychical zero. It is a most positively and

definitely qualified inner fact, with a complexion all its own. Of course there are many mental facts which it is *not*. It knows *q*, if *q* be a reality, with a very minimum of knowledge. It neither dates nor locates it. It neither classes nor names it. And it neither knows itself as a feeling, nor contrasts itself with other feelings, nor estimates its own duration or intensity. It is, in short, if there is no more of it than this, a most dumb and helpless and useless kind of thing.

But if we must describe it by so many negations, and if it can say nothing *about* itself or *about* anything else, by what right do we deny that it is a psychical zero? And may not the 'relationists' be right after all?

In the innocent looking word 'about' lies the solution of this riddle; and a simple enough solution it is when frankly looked at. A quotation from a too seldom quoted book, the *Exploratio Philosophica* of John Grote (London, 1865), p. 60, will form the best introduction to it.

'Our knowledge,' writes Grote, 'may be contemplated in either of two ways, or, to use other words, we may speak in a double manner of the "object" of knowledge. That is, we may either use language thus: we *know* a thing, a man, etc.; or we may use it thus: we know such and such things *about* the thing, the man, etc. Language in general, following its true logical instinct, distinguishes between these two applications of the notion of knowledge, the one being γυνᾶναι, *noscere*, *kennen*, *connaître*, the other being εἰδέναι, *scire*, *wissen*, *savoir*. In the origin, the former may be considered more what I have called phenomenal—it is the notion of knowledge as *acquaintance* or familiarity with what is known; which notion is perhaps more akin to the phenomenal bodily communication, and is less purely intellectual than the other; it is the kind of knowledge which we have of a thing by the presentation to the senses or the representation of it in picture or type, a *Vorstellung*. The other, which is

what we express in judgments or propositions, what is embodied in *Begriffe* or concepts without any necessary imaginative representation, is in its origin the more intellectual notion of knowledge. There is no reason, however, why we should not express our knowledge, whatever its kind, in either manner, provided only we do not confusedly express it, in the same proposition or piece of reasoning, in both.'

Now obviously if our supposed feeling of *q* is (if knowledge at all) only knowledge of the mere acquaintance-type, it is milking a he-goat, as the ancients would have said, to try to extract from it any deliverance *about* anything under the sun, even about itself. And it is as unjust, after our failure, to turn upon it and call it a psychical nothing, as it would be, after our fruitless attack upon the billy-goat, to proclaim the non-lactiferous character of the whole goat-tribe. But the entire industry of the Hegelian school in trying to shove simple sensation out of the pale of philosophic recognition is founded on this false issue. It is always the 'speechlessness' of sensation, its inability to make any 'statement,'³ that is held to make the very notion of it meaningless, and to justify the student of knowledge in scouting it out of existence. 'Significance,' in the sense of standing as the sign of other mental states, is taken to be the sole function of what mental states we have; and from the perception that our little primitive sensation has as yet no significance in this literal sense, it is an easy step to call it first meaningless, next senseless, then vacuous, and finally to brand it as absurd and inadmissible. But in this universal liquidation, this everlasting slip, slip, slip, of direct acquaintance into knowledge-*about*, until at last nothing is left about which the knowledge can be supposed to obtain, does not all 'significance' depart from the situation? And when our knowledge about things has

reached its never so complicated perfection, must there not needs abide alongside of it and inextricably mixed in with it some acquaintance with *what* things all this knowledge is about?

Now, our supposed little feeling gives a *what*; and if other feelings should succeed which remembered the first, its *what* may stand as subject or predicate of some piece of knowledge-about, of some judgment, perceiving relations between it and other *whats* which the other feelings may know. The hitherto dumb *q* will then receive a name and be no longer speechless. But every name, as students of logic know, has its 'denotation'; and the denotation always means some reality or content, relationless *ab extra* or with its internal relations unanalyzed, like the *q* which our primitive sensation is supposed to know. No relation-expressing proposition is possible except on the basis of a preliminary acquaintance with such 'facts,' with such contents, as this. Let the *q* be fragrance, let it be toothache, or let it be a more complex kind of feeling, like that of the full-moon swimming in her blue abyss; it must first come in that simple shape, and be held fast in that first intention, before any knowledge *about* it can be attained. The knowledge *about* it is *it* with a context added. Undo *it*, and what is added cannot be *context*.⁴

Let us say no more then about this objection, but enlarge our thesis, thus: If there be in the universe a *q* other than the *q* in the feeling, the latter may have acquaintance with an entity ejective to itself; an acquaintance moreover, which, as mere acquaintance, it would be hard to imagine susceptible either of improvement or increase, being in its way complete; and which would oblige us (so long as we refuse not to call acquaintance knowledge) to say not only that the feeling is cognitive, but that all qualities of feeling, *so long as*

there is anything outside of them which they resemble, are feelings of qualities of existence, and perceptions of outward fact.

The point of this vindication of the cognitive function of the first feeling lies, it will be noticed, in the discovery that *q* does exist elsewhere than in it. In case this discovery were not made, we could not be sure the feeling was cognitive; and in case there were nothing outside to be discovered, we should have to call the feeling a dream. But the feeling itself cannot make a discovery. Its own *q* is the only *q* it grasps; and its own nature is not a particle altered by having the self-transcendent function of cognition either added to it or taken away. The function is accidental; synthetic, not analytic; and falls outside and not inside its being.⁵

A feeling feels as a gun shoots. If there be nothing to be felt or hit, they discharge themselves *ins blaue hinein*. If, however, something starts up opposite them, they no longer simply shoot or feel, they hit and know.

But with this arises a worse objection than any yet made. We the critics look on and see a real *q* and a feeling of *q*; and because the two resemble each other, we say the one knows the other. But what right have we to say this until we know that the feeling of *q* means to stand for or represent just that *same* other *q*? Suppose, instead of one *q*, a number of real *q*'s in the field. If the gun shoots and hits, we can easily see which one of them it hits. But how can we distinguish which one the feeling knows? It knows the one it stands for. But which one *does* it stand for? It declares no intention in this respect. It merely resembles; it resembles all indifferently; and resembling, *per se*, is not necessarily representing or standing-for at all. Eggs resemble each other, but do not on that account represent, stand for, or know each other. And if you say this is because nei-

ther of them is a *feeling*, then imagine the world to consist of nothing but toothaches, which *are* feelings, feelings resembling each other exactly,—would they know each other the better for all that?

The case of *q* being a bare quality like that of toothache-pain is quite different from that of its being a concrete individual thing. There is practically no test for deciding whether the feeling of a bare quality means to represent it or not. It can *do* nothing to the quality beyond resembling it, simply because an abstract quality is a thing to which nothing can be done. Being without context or environment or *principium individuationis*, a quiddity with no haecceity, a platonic idea, even duplicate editions of such a quality (were they possible), would be indiscernible, and no sign could be given, no result altered, whether the feeling meant to stand for this edition or for that, or whether it simply resembled the quality without meaning to stand for it at all.

If now we grant a genuine pluralism of editions to the quality *q*, by assigning to each a *context* which shall distinguish it from its mates, we may proceed to explain which edition of it the feeling knows, by extending our principle of resemblance to the context too, and saving the feeling knows the particular *q* whose context it most exactly duplicates. But here again the theoretic doubt recurs: duplication and coincidence, are they knowledge? The gun shows which *q* it points to and hits, by *breaking* it. Until the feeling can show us which *q* it points to and knows, by some equally flagrant token, why are we not free to deny that it either points to or knows any one of the *real q's* at all, and to affirm that the word 'resemblance' exhaustively describes its relation to the reality?

Well, as a matter of fact, every actual feeling *does* show us, quite as flagrantly as the gun, which *q* it points to; and practically in concrete cases the matter is de-

cided by an element we have hitherto left out. Let us pass from abstractions to possible instances, and ask our obliging *deus ex machina* to frame for us a richer world. Let him send me, for example, a dream of the death of a certain man, and let him simultaneously cause the man to die. How would our practical instinct spontaneously decide whether this were a case of cognition of the reality, or only a sort of marvellous coincidence of a resembling reality with my dream? Just such puzzling cases as this are what the 'society for psychical research' is busily collecting and trying to interpret in the most reasonable way.

If my dream were the only one of the kind I ever had in my life, if the context of the death in the dream differed in many particulars from the real death's context, and if my dream led me to no action about the death, unquestionably we should all call it a strange coincidence, and naught besides. But if the death in the dream had a long context, agreeing point for point with every feature that attended the real death; if I were constantly having such dreams, all equally perfect, and if on awaking I had a habit of *acting* immediately as if they were true and so getting 'the start' of my more tardily instructed neighbors,—we should in all probability have to admit that I had some mysterious kind of clairvoyant power, that my dreams in an inscrutable way meant just those realities they figured, and that the word 'coincidence' failed to touch the root of the matter. And whatever doubts any one preserved would completely vanish, if it should appear that from the midst of my dream I had the power of *interfering* with the course of the reality, and making the events in it turn this way or that, according as I dreamed they should. Then at least it would be certain that my waking critics and my dreaming self were dealing with the *same*.

And thus do men invariably decide such a question.

The falling of the dream's practical consequences into the real world, and the extent of the resemblance between the two worlds are the criteria they instinctively use.⁶ All feeling is for the sake of action, all feeling results in action,—to-day no argument is needed to prove these truths. But by a most singular disposition of nature which we may conceive to have been different, *my feelings act upon the realities within my critic's world*. Unless, then, my critic can prove that my feeling does not 'point to' those realities which it acts upon, how can he continue to doubt that he and I are alike cognizant of one and the same real world? If the action is performed in one world, that must be the world the feeling intends; if in another world, *that* is the world the feeling has in mind. If your feeling bear no fruits in my world, I call it utterly detached from my world; I call it a solipsism, and call its world a dream-world. If your toothache do not prompt you to *act* as if I had a toothache, nor even as if I had a separate existence; if you neither say to me, 'I know now how you must suffer!' nor tell me of a remedy, I deny that your feeling, however it may resemble mine, is really cognizant of mine. It gives no *sign* of being cognizant, and such a sign is absolutely necessary to my admission that it is.

Before I can think you to mean my world, you must affect my world; before I can think you to mean much of it, you must affect much of it; and before I can be sure you mean it *as I do*, you must affect it *just as I should* if I were in your place. Then I, your critic, will gladly believe that we are thinking, not only of the same reality, but that we are thinking it *alike*, and thinking of much of its extent.

Without the practical effects of our neighbor's feelings on our own world, we should never suspect the existence of our neighbor's feelings at all, and of course should never find ourselves playing the critic as we do in this

article. The constitution of nature is very peculiar. In the world of each of us are certain objects called human bodies, which move about and act on all the other objects there, and the occasions of their action are in the main what the occasions of our action would be, were they our bodies. They use words and gestures, which, if we used them, would have thoughts behind them,—no mere thoughts *überhaupt*, however, but strictly determinate thoughts. I think you have the notion of fire in general, because I see you act towards this fire in my room just as I act towards it,—poke it and present your person towards it, and so forth. But that binds me to believe that if you feel 'fire' at all, *this* is the fire you feel. As a matter of fact, whenever we constitute ourselves into psychological critics, it is not by dint of discovering which reality a feeling 'resembles' that we find out which reality it means. We become first aware of which one it means, and then we suppose that to be the one it resembles. We see each other looking at the same objects, pointing to them and turning them over in various ways, and thereupon we hope and trust that all of our several feelings resemble the reality and each other. But this is a thing of which we are never theoretically sure. Still, it would practically be a case of *grübel sucht*, if a ruffian were assaulting and drubbing my body, to spend much time in subtle speculation either as to whether his vision of my body resembled mine, or as to whether the body he really *meant* to insult were not some body in his mind's eye, altogether other from my own. The practical point of view brushes such metaphysical cobwebs away. If what he have in mind be not *my* body, why call we it a body at all? His mind is inferred by me as a term, to whose existence we trace the things that happen. The inference is quite void if the term, once inferred, be separated from its connection with the body that made me infer it, and connected with

another that is not mine at all. No matter for the metaphysical puzzle of how our two minds, the ruffian's and mine, *can* mean the same body. Men who see each other's bodies sharing the same space, treading the same earth, splashing the same water, making the same air resonant, and pursuing the same game and eating out of the same dish, will never practically believe in a pluralism of solipsistic worlds.

Where, however, the actions of one mind seem to take no effect in the world of the other, the case is different. This is what happens in poetry and fiction. Every one knows *Ivanhoe*, for example; but so long as we stick to the story pure and simple without regard to the facts of its production, few would hesitate to admit that there are as many different *Ivanhoses* as there are different minds cognizant of the story.⁷ The fact that all these *Ivanhoses* *resemble* each other does not prove the contrary. But if an alteration invented by one man in his version were to reverberate immediately through all the other versions, and produce changes therein, we should then easily agree that all these thinkers were thinking the *same* *Ivanhoe*, and that, fiction or no fiction, it formed a little world common to them all.

Having reached this point, we may take up our thesis and improve it again. Still calling the reality by the name of *q*, and letting the critic's feeling vouch for it, we can say that any other feeling will be held cognizant of *q*, provided it both resemble *q*, and refer to *q*, as shown by its either modifying *q* directly, or modifying some other reality, *p* or *r*, which the critic knows to be continuous with *q*. Or more shortly, thus: *The feeling of q knows whatever reality it resembles, and either directly or indirectly operates on.* If it resemble without operating, it is a dream; if it operate without resembling, it is an error.⁸

It is to be feared that the reader may consider this

formula rather insignificant and obvious, and hardly worth the labor of so many pages, especially when he considers that the only cases to which it applies are *percepts*, and that the whole field of symbolic or conceptual thinking seems to elude its grasp. Where the reality is either a material thing or act, or a state of the critic's consciousness, I may both mirror it in my mind and operate upon it—in the latter case indirectly, of course—as soon as I perceive it. But there are many cognitions, universally allowed to be such, which neither mirror nor operate on their realities.

In the whole field of symbolic thought we are universally held both to intend, to speak of, and to reach conclusions about—to know in short—particular realities, without having in our subjective consciousness any mind-stuff that resembles them even in a remote degree. We are instructed about them by language which awakens no consciousness beyond its sound; and we know *which* realities they are by the faintest and most fragmentary glimpse of some remote context they may have and by no direct imagination of themselves. As minds may differ here, let me speak in the first person. I am sure that my own current thinking has *words* for its almost exclusive subjective material, words which are made intelligible by being referred to some reality that lies beyond the horizon of direct consciousness, and of which I am only aware as of a terminal *more* existing in a certain direction, to which the words might lead but do not lead yet. The *subject*, or *topic*, of the words is usually something towards which I mentally seem to pitch them in a backward way, almost as I might jerk my thumb over my shoulder to point at something, without looking round, if I were only entirely sure that it was there. The *up-shot*, or *conclusion*, of the words is something towards which I seem to incline my head forwards, as if giving assent to its existence, tho all my mind's eye catches

sight of may be some tatter of an image connected with it, which tatter, however, if only endued with the feeling of familiarity and reality, makes me feel that the whole to which it belongs is rational and real, and fit to be let pass.

Here then is cognitive consciousness on a large scale, and yet what it knows, it hardly resembles in the least degree. The formula last laid down for our thesis must therefore be made more complete. We may now express it thus: *A percept knows whatever reality it directly or indirectly operates on and resembles; a conceptional feeling, or thought knows⁹ a reality, whenever it actually or potentially terminates in a percept that operates on, or resembles that reality, or is otherwise connected with it or with its context.* The latter percept may be either sensation or sensorial idea; and when I say the thought must *terminate* in such a percept, I mean that it must ultimately be capable of leading up thereto,—by the way of practical experience, if the terminal feeling be a sensation; by the way of logical or habitual suggestion, if it be only an image in the mind.

Let an illustration make this plainer. I open the first book I take up, and read the first sentence that meets my eye: 'Newton saw the handiwork of God in the heavens as plainly as Paley in the animal kingdom.' I immediately look back and try to analyze the subjective state in which I rapidly apprehended this sentence as I read it. In the first place there was an obvious feeling that the sentence was intelligible and rational and related to the world of realities. There was also a sense of agreement or harmony between 'Newton,' 'Paley,' and 'God.' There was no apparent image connected with the words 'heavens,' or 'handiwork,' or 'God'; they were words merely. With 'animal kingdom' I think there was the faintest consciousness (it may possibly have been an image of the steps) of the Museum of Zoölogy in the

town of Cambridge where I write. With 'Paley' there was an equally faint consciousness of a small dark leather book; and with 'Newton' a pretty distinct vision of the right-hand lower corner of a curling periwig. This is all the mind-stuff I can discover in my first consciousness of the meaning of this sentence, and I am afraid that even not all of this would have been present had I come upon the sentence in a genuine reading of the book, and not picked it out for an experiment. And yet my consciousness was truly cognitive. The sentence is 'about realities' which my psychological critic—for we must not forget him—acknowledges to be such, even as he acknowledges my distinct feeling that they *are* realities, and my acquiescence in the general rightness of what I read of them, to be true knowledge on my part.

Now what justifies my critic in being as lenient as this? This singularly inadequate consciousness of mine, made up of symbols that neither resemble nor affect the realities they stand for,—how can he be sure it is cognizant of the very realities he has himself in mind?

He is sure because in countless like cases he has seen such inadequate and symbolic thoughts, by developing themselves, terminate in percepts that practically modified and presumably resembled his own. By 'developing' themselves is meant obeying their tendencies, following up the suggestions nascently present in them, working in the direction in which they seem to point, clearing up the penumbra, making distinct the halo, unravelling the fringe, which is part of their composition, and in the midst of which their more substantive kernel of subjective content seems consciously to lie. Thus I may develop my thought in the Paley direction by procuring the brown leather volume and bringing the passages about the animal kingdom before the critic's eyes. I may satisfy him that the words mean for me just what they mean for him, by showing him *in concreto* the very

animals and their arrangements, of which the pages treat. I may get Newton's works and portraits; or if I follow the line of suggestion of the wig, I may smother my critic in seventeenth-century matters pertaining to Newton's environment, to show that the word 'Newton' has the same *locus* and relations in both our minds. Finally I may, by act and word, persuade him that what I mean by God and the heavens and the analogy of the handiworks, is just what he means also.

My demonstration in the last resort is to his *senses*. My thought makes me act on his senses much as he might himself act on them, were he pursuing the consequences of a perception of his own. Practically then *my* thought terminates in *his* realities. He willingly supposes it, therefore, to be *of* them, and inwardly to *resemble* what his own thought would be, were it of the same symbolic sort as mine. And the pivot and fulcrum and support of his mental persuasion, is the sensible operation which my thought leads me, or may lead, to effect—the bringing of Paley's book, of Newton's portrait, etc., before his very eyes.

In the last analysis, then, we believe that we all know and think about and talk about the same world, because *we believe our PERCEPTS are possessed by us in common*. And we believe this because the percepts of each one of us seem to be changed in consequence of changes in the percepts of some one else. What I am for you is in the first instance a percept of your own. Unexpectedly, however, I open and show you a book, uttering certain sounds the while. These acts are also your percepts, but they so resemble acts of yours with feelings prompting them, that you cannot doubt I have the feelings too, or that the book is one book felt in both our worlds. That it is felt in the same way, that my feelings of it resemble yours, is something of which we never can be sure, but which we assume as the simplest hypothesis that meets

quem of the mind. To find such sensational *termini* should be our aim with all our higher thought. They end discussion; they destroy the false conceit of knowledge; and without them we are all at sea with each other's meaning. If two men act alike on a percept, they believe themselves to feel alike about it; if not, they may suspect they know it in differing ways. We can never be sure we understand each other till we are able to bring the matter to this test.¹² This is why metaphysical discussions are so much like fighting with the air; they have no practical issue of a sensational kind. 'Scientific' theories, on the other hand, always terminate in definite percepts. You can deduce a possible sensation from your theory and, taking me into your laboratory, prove that your theory is true of my world by giving me the sensation then and there. Beautiful is the flight of conceptual reason through the upper air of truth. No wonder philosophers are dazzled by it still, and no wonder they look with some disdain at the low earth of feeling from which the goddess launched herself aloft. But woe to her if she return not home to its acquaintance; *Nirgends haften dann die unsichern Sohlen*—every crazy wind will take her, and, like a fire-balloon at night, she will go out among the stars.

NOTE.—The reader will easily see how much of the account of the truth-function developed later in *Pragmatism* was already explicit in this earlier article, and how much came to be defined later. In this earlier article we find distinctly asserted:—

1. The reality, external to the true idea;
2. The critic, reader, or epistemologist, with his own belief, as warrant for this reality's existence;
3. The experienceable environment, as the vehicle or medium connecting knower with known, and yielding the cognitive *relation*;
4. The notion of *pointing*, through this medium, to the reality, as one condition of our being said to know it;
5. That of *resembling* it, and eventually *affecting* it, as determining the pointing to it and not to something else.
6. The elimination of the 'epistemological gulf,' so that the whole truth-relation falls inside of the continuities of concrete ex-

THE TIGERS OF INDIA¹

There are two ways of knowing things, knowing them immediately or intuitively, and knowing them conceptually or representatively. Altho such things as the white paper before our eyes can be known intuitively, most of the things we know, the tigers now in India, for example, or the scholastic system of philosophy, are known only representatively or symbolically.

Suppose, to fix our ideas, that we take first a case of conceptual knowledge; and let it be our knowledge of the tigers in India, as we sit here. Exactly what do we *mean* by saying that we here know the tigers? What is the precise fact that the cognition so confidently claimed is *known-as*, to use Shadworth Hodgson's inelegant but valuable form of words?

Most men would answer that what we mean by knowing the tigers is having them, however absent in body, become in some way present to our thought; or that our knowledge of them is known as presence of our thought to them. A great mystery is usually made of this peculiar presence in absence; and the scholastic philosophy, which is only common sense grown pedantic, would explain it as a peculiar kind of existence, called *intentional*

inexistence, of the tigers in our mind. At the very least, people would say that what we mean by knowing the tigers is mentally *pointing* towards them as we sit here.

But now what do we mean by *pointing*, in such a case as this? What is the pointing known-as, here?

To this question I shall have to give a very prosaic answer—one that traverses the prepossessions not only of common sense and scholasticism, but also those of nearly all the epistemological writers whom I have ever read. The answer, made brief, is this: The pointing of our thought to the tigers is known simply and solely as a procession of mental associates and motor consequences that follow on the thought, and that would lead harmoniously, if followed out, into some ideal or real context, or even into the immediate presence, of the tigers. It is known as our rejection of a jaguar, if that beast were shown us as a tiger; as our assent to a genuine tiger if so shown. It is known as our ability to utter all sorts of propositions which don't contradict other propositions that are true of the real tigers. It is even known, if we take the tigers very seriously, as actions of ours which may terminate in directly intuited tigers, as they would if we took a voyage to India for the purpose of tiger-hunting and brought back a lot of skins of the striped rascals which we had laid low. In all this there is no self-transcendancy in our mental images *taken by themselves*. They are one phenomenal fact; the tigers are another; and their pointing to the tigers is a perfectly commonplace intra-experiential relation, *if you once grant a connecting world to be there*. In short, the ideas and the tigers are in themselves as loose and separate, to use Hume's language, as any two things can be; and pointing means here an operation as external and adventitious as any that nature yields.²

I hope you may agree with me now that in representative knowledge there is no special inner mystery, but

only an outer chain of physical or mental intermediaries connecting thought and thing. *To know an object is here to lead to it through a context which the world supplies.* All this was most instructively set forth by our colleague D. S. Miller at our meeting in New York last Christmas, and for re-confirming my sometime wavering opinion, I owe him this acknowledgment.³

Let us next pass on to the case of immediate or intuitive acquaintance with an object, and let the object be the white paper before our eyes. The thought-stuff and the thing-stuff are here indistinguishably the same in nature, as we saw a moment since, and there is no context of intermediaries or associates to stand between and separate the thought and thing. There is no 'presence in absence' here, and no 'pointing,' but rather an allround embracing of the paper by the thought; and it is clear that the knowing cannot now be explained exactly as it was when the tigers were its object. Dotted all through our experience are states of immediate acquaintance just like this. Somewhere our belief always does rest on ultimate data like the whiteness, smoothness, or squareness of this paper. Whether such qualities be truly ultimate aspects of being, or only provisional suppositions of ours, held-to till we get better informed, is quite immaterial for our present inquiry. So long as it is believed in, we see our object face to face. What now do we mean by 'knowing' such a sort of object as this? For this is also the way in which we should know the tiger if our conceptual idea of him were to terminate by having led us to his lair?

This address must not become too long, so I must give my answer in the fewest words. And let me first say this: So far as the white paper or other ultimate datum of our experience is considered to enter also into some one else's experience, and we, in knowing it, are held to know it there as well as here; so far, again, as it is considered to

be a mere mask for hidden molecules that other now impossible experiences of our own might some day lay bare to view; so far it is a case of tigers in India again—the things known being absent experiences, the knowing can only consist in passing smoothly towards them through the intermediary context that the world supplies. But if our own private vision of the paper be considered in abstraction from every other event, as if it constituted by itself the universe (and it might perfectly well do so, for aught we can understand to the contrary), then the paper seen and the seeing of it are only two names for one indivisible fact which, properly named, is *the datum, the phenomenon, or the experience*. The paper is in the mind and the mind is around the paper, because paper and mind are only two names that are given later to the one experience, when, taken in a larger world of which it forms a part, its connections are traced in different directions.⁴ *To know immediately, then, or intuitively, is for mental content and object to be identical*. This is a very different definition from that which we gave of representative knowledge; but neither definition involves those mysterious notions of self-transcendency and presence in absence which are such essential parts of the ideas of knowledge, both of philosophers and of common men.⁵

HUMANISM AND TRUTH¹

Receiving from the Editor of *Mind* an advance proof of Mr. Bradley's article on 'Truth and Practice,' I understand this as a hint to me to join in the controversy over 'Pragmatism' which seems to have seriously begun. As my name has been coupled with the movement, I deem it wise to take the hint, the more so as in some quarters greater credit has been given me than I deserve, and probably undeserved discredit in other quarters falls also to my lot.

First, as to the word 'pragmatism.' I myself have only used the term to indicate a method of carrying on abstract discussion. The serious meaning of a concept, says Mr. Peirce, lies in the concrete difference to some one which its being true will make. Strive to bring all debated conceptions to that 'pragmatic' test, and you will escape vain wrangling: if it can make no practical difference which of two statements be true, then they are really one statement in two verbal forms; if it can make no practical difference whether a given statement be true or false, then the statement has no real meaning. In neither case is there anything fit to quarrel about: we may save our breath, and pass to more important things.

All that the pragmatic method implies, then, is that truths should *have* practical² consequences. In England the word has been used more broadly still, to cover the notion that the truth of any statement *consists* in the consequences, and particularly in their being good consequences. Here we get beyond affairs of method altogether; and since my pragmatism and this wider pragmatism are so different, and both are important enough to have different names, I think that Mr. Schiller's proposal to call the wider pragmatism by the name of 'humanism' is excellent and ought to be adopted. The narrower pragmatism may still be spoken of as the 'pragmatic method.'

I have read in the past six months many hostile reviews of Schiller's and Dewey's publications; but with the exception of Mr. Bradley's elaborate indictment, they are out of reach where I write, and I have largely forgotten them. I think that a free discussion of the subject on my part would in any case be more useful than a polemic attempt at rebutting these criticisms in detail. Mr. Bradley in particular can be taken care of by Mr. Schiller. He repeatedly confesses himself unable to comprehend Schiller's views, he evidently has not sought to do so sympathetically, and I deeply regret to say that his laborious article throws, for my mind, absolutely no useful light upon the subject. It seems to me on the whole an *ignotatio elenchi*, and I feel free to disregard it altogether.

The subject is unquestionably difficult. Messrs. Dewey's and Schiller's thought is eminently an induction, a generalization working itself free from all sorts of entangling particulars. If true, it involves much restatement of traditional notions. This is a kind of intellectual product that never attains a classic form of expression when first promulgated. The critic ought therefore not to be too sharp and logic-chopping in his dealings with it, but should weigh it as a whole, and especially weigh it

against its possible alternatives. One should also try to apply it first to one instance, and then to another to see how it will work. It seems to me that it is emphatically not a case for instant execution, by conviction of intrinsic absurdity or of self-contradiction, or by caricature of what it would look like if reduced to skeleton shape. Humanism is in fact much more like one of those secular changes that come upon public opinion overnight, as it were, borne upon tides 'too deep for sound or foam,' that survive all the crudities and extravagances of their advocates, that you can pin to no one absolutely essential statement, nor kill by any one decisive stab.

Such have been the changes from aristocracy to democracy, from classic to romantic taste, from theistic to pantheistic feeling, from static to evolutionary ways of understanding life—changes of which we all have been spectators. Scholasticism still opposes to such changes the method of confutation by single decisive reasons, showing that the new view involves self-contradiction, or traverses some fundamental principle. This is like stopping a river by planting a stick in the middle of its bed. Round your obstacle flows the water and 'gets there all the same.' In reading some of our opponents, I am not a little reminded of those catholic writers who refute darwinism by telling us that higher species cannot come from lower because *minus nequit gignere plus*, or that the notion of transformation is absurd, for it implies that species tend to their own destruction, and that would violate the principle that every reality tends to persevere in its own shape. The point of view is too myopic, too tight and close to take in the inductive argument. Wide generalizations in science always meet with these summary refutations in their early days; but they outlive them, and the refutations then sound oddly antiquated and scholastic. I cannot help suspecting that the humanistic theory is going through this kind of would-be refutation at present.

The one condition of understanding humanism is to become inductive-minded oneself, to drop rigorous definitions, and follow lines of least resistance 'on the whole.' 'In other words,' an opponent might say, 'resolve your intellect into a kind of slush.' 'Even so,' I make reply,— 'if you will consent to use no politer word.' For humanism, conceiving the more 'true' as the more 'satisfactory' (Dewey's term), has sincerely to renounce rectilinear arguments and ancient ideals of rigor and finality. It is in just this temper of renunciation, so different from that of pyrrhonic scepticism, that the spirit of humanism essentially consists. Satisfactoriness has to be measured by a multitude of standards, of which some, for aught we know, may fail in any given case; and what is more satisfactory than any alternative in sight, may to the end be a sum of *pluses* and *minuses*, concerning which we can only trust that by ulterior corrections and improvements a maximum of the one and a minimum of the other may some day be approached. It means a real change of heart, a break with absolutistic hopes, when one takes up this inductive view of the conditions of belief.

As I understand the pragmatist way of seeing things, it owes its being to the break-down which the last fifty years have brought about in the older notions of scientific truth. 'God geometrizes,' it used to be said; and it was believed that Euclid's elements literally reproduced his geometrizing. There is an eternal and unchangeable 'reason'; and its voice was supposed to reverberate in *Barbara* and *Celarent*. So also of the 'laws of nature,' physical and chemical, so of natural history classifications—all were supposed to be exact and exclusive duplicates of pre-human archetypes buried in the structure of things, to which the spark of divinity hidden in our intellect enables us to penetrate. The anatomy of the world is logical, and its logic is that of a university professor, it was thought. Up to about 1850 almost every one believed that

sciences expressed truths that were exact copies of a definite code of non-human realities. But the enormously rapid multiplication of theories in these latter days has well-nigh upset the notion of any one of them being a more literally objective kind of thing than another. There are so many geometries, so many logics, so many physical and chemical hypotheses, so many classifications, each one of them good for so much and yet not good for everything, that the notion that even the truest formula may be a human device and not a literal transcript has dawned upon us. We hear scientific laws now treated as so much 'conceptual shorthand,' true so far as they are useful but no farther. Our mind has become tolerant of symbol instead of reproduction, of approximation instead of exactness, of plasticity instead of rigor. 'Energetics,' measuring the bare face of sensible phenomena so as to describe in a single formula all their changes of 'level,' is the last word of his scientific humanism, which indeed leaves queries enough outstanding as to the reason for so curious a congruence between the world and the mind, but which at any rate makes our whole notion of scientific truth more flexible and genial than it used to be.

It is to be doubted whether any theorizer to-day, either in mathematics, logic, physics or biology, conceives himself to be literally re-editing processes of nature or thoughts of God. The main forms of our thinking, the separation of subjects from predicates, the negative, hypothetical and disjunctive judgments, are purely human habits. The ether, as Lord Salisbury said, is only a noun for the verb to undulate; and many of our theological ideas are admitted, even by those who call them 'true,' to be humanistic in like degree.

I fancy that these changes in the current notions of truth are what originally gave the impulse to Messrs. Dewey's and Schiller's views. The suspicion is in the air nowadays that the superiority of one of our formulas to

another may not consist so much in its literal 'objectivity,' as in subjective qualities like its usefulness, its 'elegance' or its congruity with our residual beliefs. Yielding to these suspicions, and generalizing, we fall into something like the humanistic state of mind. Truth we conceive to mean everywhere, not duplication, but addition; not the constructing of inner copies of already complete realities, but rather the collaborating with realities so as to bring about a clearer result. Obviously this state of mind is at first full of vagueness and ambiguity. 'Collaborating' is a vague term; it must at any rate cover conceptions and logical arrangements. 'Clearer' is vaguer still. Truth must bring clear thoughts, as well as clear the way to action. 'Reality' is the vaguest term of all. The only way to test such a programme at all is to apply it to the various types of truth, in the hope of reaching an account that shall be more precise. Any hypothesis that forces such a review upon one has one great merit, even if in the end it prove invalid: it gets us better acquainted with the total subject. To give the theory plenty of 'rope' and see if it hangs itself eventually is better tactics than to choke it off at the outset by abstract accusations of self-contradiction. I think therefore that a decided effort at sympathetic mental play with humanism is the provisional attitude to be recommended to the reader.

When I find myself playing sympathetically with humanism, something like what follows is what I end by conceiving it to mean.

Experience is a process that continually gives us new material to digest. We handle this intellectually by the mass of beliefs of which we find ourselves already possessed, assimilating, rejecting, or rearranging in different degrees. Some of the apperceiving ideas are recent acquisitions of our own, but most of them are common-sense traditions of the race. There is probably not a

common-sense tradition, of all those which we now live by, that was not in the first instance a genuine discovery, an inductive generalization like those more recent ones of the atom, of inertia, of energy, of reflex action, or of fitness to survive. The notions of one Time and of one Space as single continuous receptacles; the distinction between thoughts and things, matter and mind; between permanent subjects and changing attributes; the conception of classes with sub-classes within them; the separation of fortuitous from regularly caused connections; surely all these were once definite conquests made at historic dates by our ancestors in their attempts to get the chaos of their crude individual experiences into a more shareable and manageable shape. They proved of such sovereign use as *denkmittel* that they are now a part of the very structure of our mind. We cannot play fast and loose with them. No experience can upset them. On the contrary, they apperceive every experience and assign it to its place.

To what effect? That we may the better foresee the course of our experiences, communicate with one another, and steer our lives by rule. Also that we may have a cleaner, clearer, more inclusive mental view.

The greatest common-sense achievement, after the discovery of one Time and one Space, is probably the concept of permanently existing things. When a rattle first drops out of the hand of a baby, he does not look to see where it has gone. Non-perception he accepts as annihilation until he finds a better belief. That our perceptions mean *beings*, rattles that are there whether we hold them in our hands or not, becomes an interpretation so luminous of what happens to us that, once employed, it never gets forgotten. It applies with equal felicity to things and persons, to the objective and to the ejective realm. However a Berkeley, a Mill, or a Cornelius may criticise it, it *works*; and in practical life we never think of 'going back'

upon it, or reading our incoming experiences in any other terms. We may, indeed, speculatively imagine a state of 'pure' experience before the hypothesis of permanent objects behind its flux had been framed; and we can play with the idea that some primeval genius might have struck into a different hypothesis. But we cannot positively imagine today what the different hypothesis could have been, for the category of trans-perceptual reality is now one of the foundations of our life. Our thoughts must still employ it if they are to possess reasonableness and truth.

This notion of a *first* in the shape of a most chaotic pure experience which sets us questions, of a *second* in the way of fundamental categories, long ago wrought into the structure of our consciousness and practically irreversible, which define the general frame within which answers must fall, and of a *third* which gives the detail of the answers in the shapes most congruous with all our present needs, is, as I take it, the essence of the humanistic conception. It represents experience in its pristine purity to be now so enveloped in predicates historically worked out that we can think of it as little more than an *Other*, of a *That*, which the mind, in Mr. Bradley's phrase, 'encounters,' and to whose stimulating presence we respond by ways of thinking which we call 'true' in proportion as they facilitate our mental or physical activities and bring us outer power and inner peace. But whether the *Other*, the universal *That*, has itself any definite inner structure, or whether, if it have any, the structure resembles any of our predicated *whats*, this is a question which humanism leaves untouched. For us, at any rate, it insists, reality is an accumulation of our own intellectual inventions, and the struggle for 'truth' in our progressive dealings with it is always a struggle to work in new nouns and adjectives while altering as little as possible the old.

It is hard to see why either Mr. Bradley's own logic or his metaphysics should oblige him to quarrel with this conception. He might consistently adopt it *verbatim et literatim*, if he would, and simply throw his peculiar absolute round it, following in this the good example of Professor Royce. Bergson in France, and his disciples, Wilbois the physicist and Leroy, are thoroughgoing humanists in the sense defined. Professor Milhaud also appears to be one; and the great Poincaré misses it by only the breadth of a hair. In Germany the name of Simmel offers itself as that of a humanist of the most radical sort. Mach and his school, and Hertz and Ostwald must be classed as humanists. The view is in the atmosphere and must be patiently discussed.

The best way to discuss it would be to see what the alternative might be. What is it indeed? Its critics make no explicit statement, Professor Royce being the only one so far who has formulated anything definite. The first service of humanism to philosophy accordingly seems to be that it will probably oblige those who dislike it to search their own hearts and heads. It will force analysis to the front and make it the order of the day. At present the lazy tradition that truth is *adæquatio intellectûs et rei* seems all there is to contradict it with. Mr. Bradley's only suggestion is that true thought 'must correspond to a determinate being which it cannot be said to make,' and obviously that sheds no new light. What is the meaning of the word to 'correspond?' Where is the 'being?' What sort of things are 'determinations,' and what is meant in this particular case by 'not to make?'

Humanism proceeds immediately to refine upon the looseness of these epithets. We correspond in *some* way with anything with which we enter into any relations at all. If it be a thing, we may produce an exact copy of it, or we may simply feel it as an existent in a certain place.

If it be a demand, we may obey it without knowing anything more about it than its push. If it be a proposition, we may agree by not contradicting it, by letting it pass. If it be a relation between things, we may act on the first thing so as to bring ourselves out where the second will be. If it be something inaccessible, we may substitute a hypothetical object for it, which, having the same consequences, will cipher out for us real results. In a general way we may simply *add our thought to it*; and if it *suffers the addition*, and the whole situation harmoniously prolongs and enriches itself, the thought will pass for true.

As for the whereabouts of the beings thus corresponded to, although they may be outside of the present thought as well as in it, humanism sees no ground for saying they are outside of finite experience itself. Pragmatically, their reality means that we submit to them, take account of them, whether we like to or not, but this we must perpetually do with experiences other than our own. The whole system of what the present experience must correspond to 'adequately' may be continuous with the present experience itself. Reality, so taken as experience other than the present, might be either the legacy of past experience or the content of experience to come. Its determinations for *us* are in any case the adjectives which our acts of judging fit to it, and those are essentially humanistic things.

To say that our thought does not 'make' this reality means pragmatically that if our own particular thought were annihilated the reality would still be there in some shape, though possibly it might be a shape that would lack something that our thought supplies. That reality is 'independent' means that there is something in every experience that escapes our arbitrary control. If it be a sensible experience it coerces our attention; if a sequence, we cannot invert it; if we compare two terms we can come to only one result. There is a push, an urgency,

within our very experience, against which we are on the whole powerless, and which drives us in a direction that is the destiny of our belief. That this drift of experience itself is in the last resort due to something independent of all possible experience may or may not be true. There may or may not be an extra-experiential 'ding an sich' that keeps the ball rolling, or an 'absolute' that lies eternally behind all the successive determinations which human thought has made. But within our experience *itself*, at any rate, humanism says, some determinations show themselves as being independent of others; some questions, if we ever ask them, can only be answered in one way; some beings, if we ever suppose them, must be supposed to have existed previously to the supposing; some relations, if they exist ever, must exist as long as their terms exist.

Truth thus means, according to humanism, the relation of less fixed parts of experience (predicates) to other relatively more fixed parts (subjects); and we are not required to seek it in a relation of experience as such to anything beyond itself. We can stay at home, for our behavior as experients is hemmed in on every side. The forces both of advance and of resistance are exerted by our own objects, and the notion of truth as something opposed to waywardness or license inevitably grows up solipsistically inside of every human life.

So obvious is all this that a common charge against the humanistic authors 'makes me tired.' 'How can a deweyite discriminate sincerity from bluff?' was a question asked at a philosophic meeting where I reported on Dewey's *Studies*. 'How can the mere³ pragmatist feel any duty to think truly?' is the objection urged by Professor Royce. Mr. Bradley in turn says that if a humanist understands his own doctrine, 'he must hold any idea, however mad, to be the truth, if any one will have it so.' And

Professor Taylor describes pragmatism as believing anything one pleases and calling it truth.

Such a shallow sense of the conditions under which men's thinking actually goes on seems to me most surprising. These critics appear to suppose that, if left to itself, the rudderless raft of our experience must be ready to drift anywhere or nowhere. Even tho there were compasses on board, they seem to say, there would be no pole for them to point to. There must be absolute sailing-directions, they insist, decreed from outside, and an independent chart of the voyage added to the 'mere' voyage itself, if we are ever to make a port. But is it not obvious that even tho there be such absolute sailing-directions in the shape of pre-human standards of truth that we *ought* to follow, the only guarantee that we shall in fact follow them must lie in our human equipment. The 'ought' would be a *brutum fulmen* unless there were a felt grain inside of our experience that conspired. As a matter of fact the devoutest believers in absolute standards must admit that men fail to obey them. Waywardness is here, in spite of the eternal prohibitions, and the existence of any amount of reality *ante rem* is no warrant against unlimited error *in rebus* being incurred. The only *real* guarantee we have against licentious thinking is the circumpressure of experience itself, which gets us sick of concrete errors, whether there be a trans-empirical reality or not. How does the partisan of absolute reality know what this orders him to think? He cannot get direct sight of the absolute; and he has no means of guessing what it wants of him except by following the humanistic clues. The only truth that he himself will ever practically *accept* will be that to which his finite experiences lead him of themselves. The state of mind which shudders at the idea of a lot of experiences left to themselves, and that augurs protection from the sheer name of an absolute, as if, however inoperative, that

might still stand for a sort of ghostly security, is like the mood of those good people who, whenever they hear of a social tendency that is damnable, 'begin to redden and to puff, and say 'Parliament or Congress ought to make a law against it,' as if an impotent decree would give relief.

All the *sanctions* of a law of truth lie in the very texture of experience. Absolute or no absolute, the concrete truth *for us* will always be that way of thinking in which our various experiences most profitably combine.

And yet, the opponent obstinately urges, your humanist will always have a greater liberty to play fast and loose with truth than will your believer in an independent realm of reality that makes the standard rigid. If by this latter believer he means a man who pretends to know the standard and who fulminates it, the humanist will doubtless prove more flexible; but no more flexible than the absolutist himself if the latter follows (as fortunately our present-day absolutists do follow) empirical methods of inquiry in concrete affairs. To consider hypotheses is surely always better than to dogmatize *ins blaue hinein*.

Nevertheless this probable flexibility of temper in him has been used to convict the humanist of sin. Believing as he does, that truth lies *in rebus*, and is at every moment our own line of most propitious reaction, he stands forever debarred, as I have heard a learned colleague say, from trying to convert opponents, for does not their view, being *their* most propitious momentary reaction, already fill the bill? Only the believer in the *ante-rem* brand of truth can on this theory seek to make converts without self-stultification. But can there be self-stultification in urging any account whatever of truth? Can the definition ever contradict the deed? 'Truth is what I feel like saying'—suppose that to be the definition. 'Well, I feel like saying that, and I want you to feel like saying it, and shall continue to say it until I get you

to agree.' Where is there any contradiction? Whatever truth may be said to be, that is the kind of truth which the saying can be held to carry. The *temper* which a saying may comport is an extra-logical matter. It may indeed be hotter in some individual absolutist than in a humanist, but it need not be so in another. And the humanist, for his part, is perfectly consistent in compassing sea and land to make one proselyte, if his nature be enthusiastic enough.

'But how *can* you be enthusiastic over any view of things which you know to have been partly made by yourself, and which is liable to alter during the next minute? How is any heroic devotion to the ideal of truth possible under such paltry conditions?'

This is just another of those objections by which the anti-humanists show their own comparatively slack hold on the realities of the situation. If they would only follow the pragmatic method and ask: 'What is truth *known-as*? What does its existence stand for in the way of concrete goods?'—they would see that the name of it is the *inbegriff* of almost everything that is valuable in our lives. The true is the opposite of whatever is instable, of whatever is practically disappointing, of whatever is useless, of whatever is lying and unreliable, of whatever is unverifiable and unsupported, of whatever is inconsistent and contradictory, of whatever is artificial and eccentric, of whatever is unreal in the sense of being of no practical account. Here are pragmatic reasons with a vengeance why we should turn to truth—truth saves us from a world of that complexion. What wonder that its very name awakens loyal feeling! In particular what wonder that all little provisional fool's paradises of belief should appear contemptible in comparison with its bare pursuit! When absolutists reject humanism because they feel it to be untrue, that means that the whole habit of their mental needs is wedded already to a different

view of reality, in comparison with which the humanistic world seems but the whim of a few irresponsible youths. Their own subjective apperceiving mass is what speaks here in the name of the eternal natures and bids them reject our humanism—as they apprehend it. Just so with us humanists, when we condemn all noble, clean-cut, fixed, eternal, rational, temple-like systems of philosophy. These contradict the *dramatic temperament* of nature, as our dealings with nature and our habits of thinking have so far brought us to conceive it. They seem oddly personal and artificial, even when not bureaucratic and professional in an absurd degree. We turn from them to the great unpeopled and unstayed wilderness of truth as we feel it to be constituted, with as good a conscience as rationalists are moved by when they turn from our wilderness into their neater and cleaner intellectual abodes.⁴

This is surely enough to show that the humanist does not ignore the character of objectivity and independence in truth. Let me turn next to what his opponents mean when they say that to be true, our thoughts must 'correspond.'

The vulgar notion of correspondence here is that the thoughts must *copy* the reality—*cognitio fit per assimilationem cogniti et cognoscentis*; and philosophy, without having ever fairly sat down to the question, seems to have instinctively accepted this idea: propositions are held true if they copy the eternal thought; terms are held true if they copy extra-mental realities. Implicitly, I think that the copy-theory has animated most of the criticisms that have been made on humanism.

A priori, however, it is not self-evident that the sole business of our mind with realities should be to copy them. Let my reader suppose himself to constitute for a time all the reality there is in the universe, and then to

receive the announcement that another being is to be created who shall know him truly. How will he represent the knowing in advance? What will he hope it to be? I doubt extremely whether it could ever occur to him to fancy it as a mere copying. Of what use to him would an imperfect second edition of himself in the new comer's interior be? It would seem pure waste of a propitious opportunity. The demand would more probably be for something absolutely new. The reader would conceive the knowing humanistically, 'the new comer,' he would say, 'must *take account of my presence by reacting on it in such a way that good would accrue to us both*. If copying be requisite to that end, let there be copying; otherwise not.' The essence in any case would not be the copying, but the enrichment of the previous world.

I read the other day, in a book of Professor Eucken's, a phrase, '*Die erhöhung des vorgefundenen daseins*,' which seems to be pertinent here. Why may not thought's mission be to increase and elevate, rather than simply to imitate and reduplicate, existence? No one who has read Lotze can fail to remember his striking comment on the ordinary view of the secondary qualities of matter, which brands them as 'illusory' because they copy nothing in the thing. The notion of a world complete in itself, to which thought comes as a passive mirror, adding nothing to fact, Lotze says is irrational. Rather is thought itself a most momentous part of fact, and the whole mission of the pre-existing and insufficient world of matter may simply be to provoke thought to produce its far more precious supplement.

'Knowing,' in short, may, for aught we can see beforehand to the contrary, be *only one way of getting into fruitful relations with reality*, whether copying be one of the relations or not.

It is easy to see from what special type of knowing the copy-theory arose. In our dealings with natural phe-

nomena the great point is to be able to foretell. Foretelling, according to such a writer as Spencer, is the whole meaning of intelligence. When Spencer's 'law of intelligence' says that inner and outer relations must 'correspond,' it means that the distribution of terms in our inner time-scheme and space-scheme must be an exact copy of the distribution in real time and space of the real terms. In strict theory the mental terms themselves need not answer to the real terms in the sense of severally copying them, symbolic mental terms being enough, if only the real dates and places be copied. But in our ordinary life the mental terms are images and the real ones are sensations, and the images so often copy the sensations, that we easily take copying of terms as well as of relations to be the natural significance of knowing. Meanwhile much, even of this common descriptive truth, is couched in verbal symbols. If our symbols *fit* the world, in the sense of determining our expectations rightly, they may even be the better for not copying its terms.

It seems obvious that the pragmatic account of all this routine of phenomenal knowledge is accurate. Truth here is a relation, not of our ideas to non-human realities, but of conceptual parts of our experience to sensational parts. Those thoughts are true which guide us to *beneficial interaction* with sensible particulars as they occur, whether they copy these in advance or not.

From the frequency of copying in the knowledge of phenomenal fact, copying has been supposed to be the essence of truth in matters rational also. Geometry and logic, it has been supposed, must copy archetypal thoughts in the Creator. But in these abstract spheres there is no need of assuming archetypes. The mind is free to carve so many figures out of space, to make so many numerical collections, to frame so many classes and

series, and it can analyze and compare so endlessly, that the very superabundance of the resulting ideas makes us doubt the 'objective' pre-existence of their models. It would be plainly wrong to suppose a God whose thought consecrated rectangular but not polar co-ordinates, or Jevons's notation but not Boole's. Yet if, on the other hand, we assume God to have thought in advance of every *possible* flight of human fancy in these directions, his mind becomes too much like a Hindoo idol with three heads, eight arms and six breasts, too much made up of superfoetation and redundancy for us to wish to copy it, and the whole notion of copying tends to evaporate from these sciences. Their objects can be better interpreted as being created step by step by men, as fast as they successively conceive them.

If now it be asked how, if triangles, squares, square roots, genera, and the like, are but improvised human 'artefacts,' their properties and relations can be so promptly known to be 'eternal,' the humanistic answer is easy. If triangles and genera are of our own production we can keep them invariant. We can make them 'timeless' by expressly decreeing that on *the things we mean* time shall exert no altering effect, that they are intentionally and it may be fictitiously abstracted from every corrupting real associate and condition. But relations between invariant objects will themselves be invariant. Such relations cannot be happenings, for by hypothesis nothing shall happen to the objects. I have tried to show in the last chapter of my *Principles of Psychology*⁶ that they can only be relations of comparison. No one so far seems to have noticed my suggestion, and I am too ignorant of the development of mathematics to feel very confident of my own view. But if it were correct it would solve the difficulty perfectly. Relations of comparison are matters of direct inspection. As soon as mental objects are mentally compared, they are per-

ceived to be either like or unlike. But once the same, always the same, once different, always different, under these timeless conditions. Which is as much as to say that truths concerning these man-made objects are necessary and eternal. We can change our conclusions only by changing our data first.

The whole fabric of the *a priori* sciences can thus be treated as a man-made product. As Locke long ago pointed out, these sciences have no immediate connection with fact. Only if a fact can be humanized by being identified with any of these ideal objects, is what was true of the objects now true also of the facts. The truth itself meanwhile was originally a copy of nothing; it was only a relation directly perceived to obtain between two artificial mental things.⁸

We may now glance at some special types of knowing, so as to see better whether the humanistic account fits. On the mathematical and logical types we need not enlarge further, nor need we return at much length to the case of our descriptive knowledge of the course of nature. So far as this involves anticipation, tho that *may* mean copying, it need, as we saw, mean little more than 'getting ready' in advance. But with many distant and future objects, our practical relations are to the last degree potential and remote. In no sense can we now get ready for the arrest of the earth's revolution by the tidal brake, for instance; and with the past, tho we suppose ourselves to know it truly, we have no practical relations at all. It is obvious that, altho interests strictly practical have been the original starting-point of our search for true phenomenal descriptions, yet an intrinsic interest in the bare describing function has grown up. We wish accounts that shall be true, whether they bring collateral profit or not. The primitive function has developed its demand for mere exercise. This theoretic

curiosity seems to be the characteristically human *differentia*, and humanism recognizes its enormous scope. A true idea now means not only one that prepares us for an actual perception. It means also one that might prepare us for a merely possible perception, or one that, if spoken, would suggest possible perceptions to others, or suggest actual perceptions which the speaker cannot share. The *ensemble* of perceptions thus thought of as either actual or possible form a system which it is obviously advantageous to us to get into a stable and consistent shape; and here it is that the common-sense notion of permanent beings finds triumphant use. Beings acting outside of the thinker explain, not only his actual perceptions, past and future, but his possible perceptions and those of every one else. Accordingly they gratify our theoretic need in a supremely beautiful way. We pass from our immediate actual through them into the foreign and the potential, and back again into the future actual, accounting for innumerable particulars by a single cause. As in those circular panoramas, where a real foreground of dirt, grass, bushes, rocks and a broken-down cannon is enveloped by a canvas picture of sky and earth and of a raging battle, continuing the foreground so cunningly that the spectator can detect no joint; so these conceptual objects, added to our present perceptual reality, fuse with it into the whole universe of our belief. In spite of all berkeleyan criticism, we do not doubt that they are really there. Tho our discovery of any one of them may only date from now, we unhesitatingly say that it not only *is*, but *was* there, if, by so saying, the past appears connected more consistently with what we feel the present to be. This is historic truth. Moses wrote the Pentateuch, we think, because if he didn't, all our religious habits will have to be undone. Julius Caesar was real, or we can never listen to history again. Trilobites were once alive, or all our thought about the strata is

at sea. Radium, discovered only yesterday, must always have existed, or its analogy with other natural elements, which are permanent, fails. In all this, it is but one portion of our beliefs reacting on another so as to yield the most satisfactory total state of mind. That state of mind, we say, sees truth, and the content of its deliverances we believe.

Of course, if you take the satisfactoriness concretely, as something felt by you now, and if, by truth, you mean truth taken abstractly and verified in the long run, you cannot make them equate, for it is notorious that the temporarily satisfactory is often false. Yet at each and every concrete moment, truth for each man is what that man 'troweth' at that moment with the maximum of satisfaction to himself; and similarly, abstract truth, truth verified by the long run, and abstract satisfactoriness, long-run satisfactoriness, coincide. If, in short, we compare concrete with concrete and abstract with abstract, the true and the satisfactory do mean the same thing. I suspect that a certain muddling of matters hereabouts is what makes the general philosophic public so impervious to humanism's claims.

The fundamental fact about our experience is that it is a process of change. For the 'trower' at any moment, truth, like the visible area round a man walking in a fog, or like what George Eliot calls 'the wall of dark seen by small fishes' eyes that pierce a span in the wide Ocean,' is an objective field which the next moment enlarges and of which it is the critic, and which then either suffers alteration or is continued unchanged. The critic sees both the first trower's truth and his own truth, compares them with each other, and verifies or confutes. His field of view is the reality independent of that earlier trower's thinking with which that thinking ought to correspond. But the critic is himself only a trower; and if the whole process of experience should terminate at that

instant, there would be no otherwise known independent reality with which *his* thought might be compared.

The immediate in experience is always provisionally in this situation. The humanism, for instance, which I see and try so hard to defend, is the completest truth attained from my point of view up to date. But, owing to the fact that all experience is a process, no point of view can ever be *the* last one. Every one is insufficient and off its balance, and responsible to later points of view than itself. You, occupying some of these later points in your own person, and believing in the reality of others, will not agree that my point of view sees truth positive, truth timeless, truth that counts, unless they verify and confirm what it sees.

You generalize this by saying that any opinion, however satisfactory, can count positively and absolutely as true only so far as it agrees with a standard beyond itself; and if you then forget that this standard perpetually grows up endogenously inside the web of the experiences, you may carelessly go on to say that what distributively holds of each experience, holds also collectively of all experience, and that experience as such and in its totality owes whatever truth it may be possessed of to its correspondence with absolute realities outside of its own being. This evidently is the popular and traditional position. From the fact that finite experiences must draw support from one another, philosophers pass to the notion that experience *überhaupt* must need an absolute support. The denial of such a notion by humanism lies probably at the root of most of the dislike which it incurs.

But is this not the globe, the elephant and the tortoise over again? Must not something end by supporting itself? Humanism is willing to let finite experience be self-supporting. Somewhere being must immediately breast nonentity. Why may not the advancing front of experi-

ence, carrying its immanent satisfactions and dissatisfactions, cut against the black inane as the luminous orb of the moon cuts the caerulean abyss? Why should anywhere the world be absolutely fixed and finished? And if reality genuinely grows, why may it not grow in these very determinations which here and now are made?

In point of fact it actually seems to grow by our mental determinations, be these never so 'true.' Take the 'great bear' or 'dipper' constellation in the heavens. We call it by that name, we count the stars and call them seven, we say they were seven before they were counted, and we say that whether any one had ever noted the fact or not, the dim resemblance to a long-tailed (or long-necked?) animal was always truly there. But what do we mean by this projection into past eternity of recent human ways of thinking? Did an 'absolute' thinker actually do the counting, tell off the stars upon his standing number-tally, and make the bear-comparison, silly as the latter is? Were they explicitly seven, explicitly bear-like, before the human witness came? Surely nothing in the truth of the attributions drives us to think this. They were only implicitly or virtually what we call them, and we human witnesses first explicated them and made them 'real.' A fact virtually pre-exists when every condition of its realization save one is already there. In this case the condition lacking is the act of the counting and comparing mind. But the stars (once the mind considers them) themselves dictate the result. The counting in no wise modifies their previous nature, and, they being what and where they are, the count cannot fall out differently. It could then *always* be made. *Never* could the number seven be questioned, *if the question once were raised.*

We have here a quasi-paradox. Undeniably something comes by the counting that was not there before. And yet that something was *always true*. In one sense you create

it, and in another sense you *find* it. You have to treat your count as being true beforehand, the moment you come to treat the matter at all.

Our stellar attributes must always be called true, then; yet none the less are they genuine additions made by our intellect to the world of fact. Not additions of consciousness only, but additions of 'content.' They copy nothing that pre-existed, yet they agree with what pre-existed, fit it, amplify it, relate and connect it with a 'wain,' a number-tally, or what not, and build it out. It seems to me that humanism is the only theory that builds this case out in the good direction, and this case stands for innumerable other kinds of case. In all such cases, odd as it may sound, our judgment may actually be said to retroact and to enrich the past.

Our judgments at any rate change the character of *future* reality by the acts to which they lead. Where these acts are acts expressive of trust,—trust, *e. g.*, that a man is honest, that our health is good enough, or that we can make a successful effort,—which acts may be a needed antecedent of the trusted things becoming true, Professor Taylor says⁷ that our trust is at any rate *untrue when it is made*, *i. e.*, before the action; and I seem to remember that he disposes of anything like a faith in the general excellence of the universe (making the faithful person's part in it at any rate more excellent) as a 'lie in the soul.' But the pathos of this expression should not blind us to the complication of the facts. I doubt whether Professor Taylor would himself be in favor of practically handling trusters of these kinds as liars. Future and present really mix in such emergencies, and one can always escape lies in them by using hypothetical forms. But Mr. Taylor's attitude suggests such absurd possibilities of practice that it seems to me to illustrate beautifully how self-stultifying the conception of a truth that shall merely register a standing fixture may become. Theoretic truth,

truth of passive copying, sought in the sole interests of copying as such, not because copying is *good for something*, but because copying ought *schlechthin* to be, seems, if you look at it coldly, to be an almost preposterous ideal. Why should the universe, existing in itself, also exist in copies? How *can* it be copied in the solidity of its objective fulness? And even if it could, what would the motive be? 'Even the hairs of your head are numbered.' Doubtless they are, virtually; but why, as an absolute proposition, *ought* the number to become copied and known? Surely knowing is only one way of interacting with reality and adding to its effect.

The opponent here will ask: 'Has not the knowing of truth any substantive value on its own account, apart from the collateral advantages it may bring? And if you allow theoretic satisfactions to exist at all, do they not crowd the collateral satisfactions out of house and home, and must not pragmatism go into bankruptcy, if she admits them at all?' The destructive force of such talk disappears as soon as we use words concretely instead of abstractly, and ask, in our quality of good pragmatists, just what the famous theoretic needs are known as and in what the intellectual satisfactions consist.

Are they not all mere matters of *consistency*—and emphatically *not* of consistency between an absolute reality and the mind's copies of it, but of actually felt consistency among judgments, objects, and habits of reacting, in the mind's own experienceable world? And are not both our need of such consistency and our pleasure in it conceivable as outcomes of the natural fact that we are beings that do develop mental *habits*—habit itself proving adaptively beneficial in an environment where the same objects, or the same kinds of objects, recur and follow 'law'? If this were so, what would have come first would have been the collateral profits of habit as such, and the theoretic life would have grown up in aid of

these. In point of fact, this seems to have been the probable case. At life's origin, any present perception may have been 'true'—if such a word could then be applicable. Later, when reactions became organized, the reactions became 'true' whenever expectation was fulfilled by them. Otherwise they were 'false' or 'mistaken' reactions. But the same class of objects needs the same kind of reaction, so the impulse to react consistently must gradually have been established, and a disappointment felt whenever the results frustrated expectation. Here is a perfectly plausible germ for all our higher consistencies. Nowadays, if an object claims from us a reaction of the kind habitually accorded only to the opposite class of objects, our mental machinery refuses to run smoothly. The situation is intellectually unsatisfactory.

Theoretic truth thus falls *within* the mind, being the accord of some of its processes and objects with other processes and objects—'accord' consisting here in well-definable relations. So long as the satisfaction of feeling such an accord is denied us, whatever collateral profits may seem to inure from what we believe in are but as dust in the balance—provided always that we are highly organized intellectually, which the majority of us are not. The amount of accord which satisfies most men and women is merely the absence of violent clash between their usual thoughts and statements and the limited sphere of sense-perceptions in which their lives are cast. The theoretic truth that most of us think we 'ought' to attain to is thus the possession of a set of predicates that do not explicitly contradict their subjects. We preserve it as often as not by leaving other predicates and subjects out.

In some men theory is a passion, just as music is in others. The form of inner consistency is pursued far beyond the line at which collateral profits stop. Such

men systematize and classify and schematize and make synoptical tables and invent ideal objects for the pure love of unifying. Too often the results, glowing with 'truth' for the inventors, seem pathetically personal and artificial to bystanders. Which is as much as to say that the purely theoretic criterion of truth can leave us in the lurch as easily as any other criterion, and that the absolutists, for all their pretensions, are 'in the same boat' concretely with those whom they attack.

I am well aware that this paper has been rambling in the extreme. But the whole subject is inductive, and sharp logic is hardly yet in order. My great trammel has been the non-existence of any definitely stated alternative on my opponents' part. It may conduce to clearness if I recapitulate, in closing, what I conceive the main points of humanism to be. They are these:—

1. An experience, perceptual or conceptual, must conform to reality in order to be true.
2. By 'reality' humanism means nothing more than the other conceptual or perceptual experiences with which a given present experience may find itself in point of fact mixed up.⁸
3. By 'conforming,' humanism means taking account-of in such a way as to gain any intellectually and practically satisfactory result.
4. To 'take account-of' and to be 'satisfactory' are terms that admit of no definition, so many are the ways in which these requirements can practically be worked out.
5. Vaguely and in general, we take account of a reality by *preserving* it in as unmodified a form as possible. But, to be then satisfactory, it must not contradict other realities outside of it which claim also to be preserved. That we must preserve all the experience we can and minimize contradiction in what we preserve, is about all that can be said in advance.

6. The truth which the conforming experience embodies may be a positive addition to the previous reality, and later judgments may have to conform to *it*. Yet, virtually at least, it may have been true previously. Pragmatically, virtual and actual truth mean the same thing: the possibility of only one answer, *when once the question is raised*.

THE PRESENT DILEMMA IN PHILOSOPHY

¹Morrison I. Swift, *Human Submission*, Part Second, Philadelphia Liberty Press, 1905, pp. 4-10.

WHAT PRAGMATISM MEANS

¹Translated in the *Revue Philosophique* for January, 1879 (vol. vii).

²"Theorie und Praxis," *Zeitsch. des Oesterreichischen Ingenieur u. Architekten-Vereines*, 1905, Nr. 4 u. 6. I find a still more radical pragmatism than Ostwald's in an address by Professor W. S. Franklin: "I think that the sickliest notion of physics, even if a student gets it, is that it is 'the science of masses, molecules, and the ether.' And I think that the healthiest notion, even if a student does not wholly get it, is that physics is the science of the ways of taking hold of bodies and pushing them!" (*Science*, January 2, 1903.)

SOME METAPHYSICAL PROBLEMS PRAGMATICALLY CONSIDERED

¹*The Foundations of Belief*, p. 30.

THE ONE AND THE MANY

¹Compare A. Bellanger: *Les concepts de Cause, et l'activité intentionnelle de l'Esprit*. Paris, Alcan, 1905, p. 79 ff.

²*The Conception of God*, New York, 1897, p. 292.

³Compare on the Ultimate, Mr. Schiller's essay "Activity and Substance," in his book entitled *Humanism*, p. 204.

PRAGMATISM AND COMMON SENSE

¹ *The Life of Reason: Reason in Common Sense*, 1905, p. 59.

PRAGMATISM'S CONCEPTION OF TRUTH

- ¹ A. E. Taylor, *Philosophical Review*, vol. xiv, p. 288.
- ² H. Rickert, *Der Gegenstand der Erkenntnis*, chapter on 'Die Urtheilsnothwendigkeit.'
- ³ I am not forgetting that Professor Rickert long ago gave up the whole notion of truth being founded on agreement with reality. Reality according to him, is whatever agrees with truth, and truth is founded solely on our primal duty. This fantastic flight, together with Mr. Joachim's candid confession of failure in his book *The Nature of Truth*, seems to me to mark the bankruptcy of rationalism when dealing with this subject. Rickert deals with part of the pragmatistic position under the head of what he calls 'Relativismus.' I can not discuss his text here. Suffice it to say that his argumentation in that chapter is so feeble as to seem almost incredible in so generally able a writer.

PRAGMATISM AND HUMANISM

- ¹ *Personal Idealism*, p. 60.
- ² Mr. Taylor in his *Elements of Metaphysics* uses this excellent pragmatic definition.

AUTHOR'S PREFACE TO THE MEANING OF TRUTH

- ¹ But 'verifiability,' I add, 'is as good as verification. For one truth-process completed, there are a million in our lives that function in [the] state of nascency. They lead us towards direct verification; lead us into the surroundings of the object they envisage; and then, if everything runs on harmoniously, we are so sure that verification is possible that we omit it, and are usually justified by all that happens.'
- ² *Op. cit.*, p. 75.
- ³ It gives me pleasure to welcome Professor Carveth Read into the pragmatistic church, so far as his epistemology goes. See his vigorous book, *The Metaphysics of Nature*, 2d Edition, Appendix A. (London, Black, 1908.) The work *What is Reality?* by Francis Howe Johnson (Boston, 1891), of which I make the acquaintance only while correcting these proofs, contains some striking anticipa-

tions of the later pragmatist view. *The Psychology of Thinking*, by Irving E. Miller (New York, Macmillan Co., 1909), which has just appeared, is one of the most convincing pragmatist documents yet published, tho it does not use the word 'pragmatism' at all. While I am making references, I cannot refrain from inserting one to the extraordinarily acute article by H. V. Knox, in the *Quarterly Review* for April, 1909.

THE FUNCTION OF COGNITION

- ¹ Read before the Aristotelian Society, December 1, 1884, and first published in *Mind*, vol. x (1885).—This, and the following articles have received a very slight verbal revision, consisting mostly in the omission of redundancy.
- ² "The Relativity of Knowledge," held in this sense, is, it may be observed in passing, one of the oddest of philosophic superstitions. Whatever facts may be cited in its favor are due to the properties of nerve-tissue, which may be exhausted by too prolonged an excitement. Patients with neuralgias that last unremittingly for days can, however, assure us that the limits of this nerve-law are pretty widely drawn. But if we physically could get a feeling that should last eternally unchanged, what atom of logical or psychological argument is there to prove that it would not be felt as long as it lasted, and felt for just what it is, all that time? The reason for the opposite prejudice seems to be our reluctance to think that so *stupid* a thing as such a feeling would necessarily be, should be allowed to fill eternity with its presence. An interminable acquaintance, leading to no knowledge-about,—such would be its condition.
- ³ See, for example, Green's Introduction to Hume's *Treatise of Human Nature*, p. 36.
- ⁴ If A enters and B exclaims, 'Didn't you see my brother on the stairs?' we all hold that A may answer, 'I saw him, but didn't know he was your brother'; ignorance of brotherhood not abolishing power to see. But those who, on account of the unrelatedness of the first facts with which we become acquainted, deny them to be 'known' to us, ought in consistency to maintain that if A did not perceive the relationship of the man on the stairs to B, it was impossible he should have noticed him at all.
- ⁵ It seems odd to call so important a function accidental, but I do not see how we can mend the matter. Just as, if we start with the reality and ask how it may come to be known, we can only reply by invoking a feeling which shall *reconstruct* it in its own more private fashion; so, if we start with the feeling and ask how it may come to know, we can only reply by invoking a reality which shall *reconstruct* it in its own more public fashion. In either case, however, the datum we start with remains just what it was.

One may easily get lost in verbal mysteries about the difference between quality of feeling and feeling of quality, between receiving and reconstructing the knowledge of a reality. But at the end we must confess that the notion of real cognition involves an unmediated dualism of the knower and the known. See Bowne's *Metaphysics*, New York, 1882, pp. 403-412, and various passages in Lotze, e. g., *Logic* § 308. ['Unmediated' is a bad word to have used.—1909.]

The thoroughgoing objector might, it is true, still return to the charge, and, granting a dream which should completely mirror the real universe, and all the actions dreamed in which should be instantly matched by duplicate actions in this universe, still insist that this is nothing more than harmony, and that it is as far as ever from being made clear whether the dream-world refers to that other world, all of whose details it so closely copies. This objection leads deep into metaphysics. I do not impugn its importance, and justice obliges me to say that but for the teachings of my colleague, Dr. Josiah Royce, I should neither have grasped its full force nor made my own practical and psychological point of view as clear to myself as it is. On this occasion I prefer to stick steadfastly to that point of view; but I hope that Dr. Royce's more fundamental criticism of the function of cognition may ere long see the light. [I referred in this note to Royce's *Religious aspect of philosophy*, then about to be published. This powerful book maintained that the notion of *referring* involved that of an inclusive mind that shall own both the real *q* and the mental *q*, and use the latter expressly as a representative symbol of the former. At the time I could not refute this transcendentalist opinion. Later, largely through the influence of Professor D. S. Miller (see his essay 'The meaning of truth and error,' in the *Philosophical Review* for 1893, vol. 2, p. 403) I came to see that any definitely experienceable workings would serve as intermediaries quite as well as the absolute mind's intentions would.]

That is, there is no *real* 'Ivanhoe,' not even the one in Sir Walter Scott's mind as he was writing the story. That one is only the *first* one of the Ivanhoe-solipsisms. It is quite true we can make it the real Ivanhoe if we like, and then say that the other Ivanhoes know it or do not know it, according as they refer to and resemble it or no. This is done by bringing in Sir Walter Scott himself as the author of the real Ivanhoe, and so making a complex object of both. This object, however, is not a story pure and simple. It has dynamic relations with the world common to the experience of all readers. Sir Walter Scott's Ivanhoe got itself printed in volumes which we all can handle, and to any one of which we can refer to see which of our versions be the true one, i. e., the original one of Scott himself. We can see the manuscript; in short we can get back to the Ivanhoe in Scott's mind by many an avenue and channel of this real world of our experience,—a thing we can by no

means do with either the Ivanhoe or the Rebecca, either the Templar or the Isaac of York, of the story taken simply as such, and detached from the conditions of its production. Everywhere, then, we have the same test: can we pass continuously from two objects in two minds to a third object which seems to be in *both* minds, because each mind feels every modification imprinted on it by the other? If so, the first two objects named are derivatives, to say the least, from the same third object, and may be held, if they resemble each other, to refer to one and the same reality.

• Among such errors are those cases in which our feeling operates on a reality which it does partially resemble, and yet does not intend: as for instance, when I take up your umbrella, meaning to take my own. I cannot be said here either to know your umbrella, or my own, which latter my feeling more completely resembles. I am mistaking them both, misrepresenting their context, etc.

We have spoken in the text as if the critic were necessarily one mind, and the feeling criticised another. But the criticised feeling and its critic may be earlier and later feelings of the same mind, and here it might seem that we could dispense with the notion of operating, to prove that critic and criticised are referring to and meaning to represent the *same*. We think we see our past feelings directly, and know what they refer to without appeal. At the worst, we can always fix the intention of our present feeling and *make* it refer to the same reality to which any one of our past feelings may have referred. So we need no 'operating' here, to make sure that the feeling and its critic mean the same real *q*. Well, all the better if this is so! We have covered the more complex and difficult case in our text, and we may let this easier one go. The main thing at present is to stick to practical psychology, and ignore metaphysical difficulties.

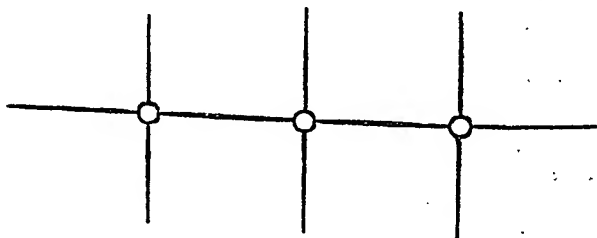
One more remark. Our formula contains, it will be observed, nothing to correspond to the great principle of cognition laid down by Professor Ferrier in his *Institutes of Metaphysic* and apparently adopted by all the followers of Fichte, the principle, namely, that for knowledge to be constituted there must be knowledge of the knowing mind along with whatever else is known: not *q*, as we have supposed, but *q plus myself*, must be the least I can know. It is certain that the common sense of mankind never dreams of using any such principle when it tries to discriminate between conscious states that are knowledge and conscious states that are not. So that Ferrier's principle, if it have any relevancy at all, must have relevancy to the metaphysical possibility of consciousness at large, and not to the practically recognized constitution of cognitive consciousness. We may therefore pass it by without further notice here.

• Is an incomplete 'thought about' that reality, that reality is its 'topic,' etc.

- ¹⁰ Though both might terminate in the same thing and be incomplete thoughts 'about' it.
- ¹¹ The difference between Idealism and Realism is immaterial here. What is said in the text is consistent with either theory. A law by which my percept shall change yours directly is no more mysterious than a law by which it shall first change a physical reality, and then the reality change yours. In either case you and I seem knit into a continuous world, and not to form a pair of solipsisms.
- ¹² 'There is no distinction of meaning so fine as to consist in anything but a possible difference of practice. . . . It appears, then, that the rule for attaining the [highest] grade of clearness of apprehension is as follows: Consider what effects, which might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object.' Charles S. Peirce: 'How to make our Ideas clear,' in *Popular Science Monthly*, New York, January, 1878, p. 293.

THE TIGERS IN INDIA

- ¹ Extracts from a presidential address before the American Psychological Association, published in the *Psychological Review*, vol. ii, p. 105 (1895).
- ² A stone in one field may 'fit,' we say, a hole in another field. But the relation of 'fitting,' so long as no one carries the stone to the hole and drops it in, is only one name for the fact that such an act *may* happen. Similarly with the knowing of the tigers here and now. It is only an anticipatory name for a further associative and terminative process that *may* occur.
- ³ See Dr. Miller's articles on Truth and Error, and on Content and Function, in the *Philosophical Review*, July, 1893, and Nov., 1895.
- ⁴ What is meant by this is that 'the experience' can be referred to either of two great associative systems, that of the experienter's



mental history, or that of the experienced facts of the world. Of both of these systems it forms part, and may be regarded, indeed, as one of their points of intersection. One might let a vertical line

stand for the mental history; but the same object, O, appears also in the mental history of different persons, represented by the other vertical lines. It thus ceases to be the private property of one experience, and becomes so to speak, a shared or public thing. We can track its outer history in this way, and represent it by the horizontal line. [It is also known representatively at other points of the vertical lines, or intuitively there again, so that the line of its outer history would have to be looped and wandering, but I make it straight for simplicity's sake.] In any case, however, it is the same *stuff* that figures in all the sets of lines.

* [The reader will observe that the text is written from the point of view of *naïf* realism or common sense, and avoids raising the idealistic controversy.]

HUMANISM AND TRUTH

* Reprinted, with slight verbal revision, from *Mind*, vol. xiii, N. S., p. 457 (October, 1904). A couple of interpolations from another article in *Mind*, 'Humanism and truth once more,' in vol. xiv, have been made.

* ['Practical' in the sense of *particular*, of course, not in the sense that the consequences may not be *mental* as well as physical.]

* I know of no 'mere' pragmatist, if *mereness* here means, as it seems to, the denial of all concreteness to the pragmatist's thought.

* [I cannot forbear quoting as an illustration of the contrast between humanist and rationalist tempers of mind, in a sphere remote from philosophy, these remarks on the Dreyfus 'affaire,' written by one who assuredly had never heard of humanism or pragmatism. 'Autant que la Révolution, "l'Affaire" est désormais une de nos "origines." Si elle n'a pas fait ouvrir le gouffre, c'est elle du moins qui a rendu patent et visible le long travail souterrain qui, silencieusement, avait préparé la séparation entre nos deux camps d'aujourd'hui, pour écarter enfin, d'un coup soudain, la France des traditionalistes (poseurs de principes, chercheurs d'unité, constructeurs de systèmes à priori) et la France éprise du fait positif et de libre examen;—la France révolutionnaire et romantique si l'on veut, celle qui met très haut l'individu, qui ne veut pas qu'un juste péricule, fût-ce pour sauver la nation, et qui cherche la vérité dans toutes ses parties aussi bien que dans une vue d'ensemble. . . . Duclaux ne pouvait pas concevoir qu'on préférât quelque chose à la vérité. Mais il voyait autour de lui de fort honnêtes gens qui, mettant en balance la vie d'un homme et la raison d'État, lui avouaient de quel poids léger ils jugeaient une simple existence individuelle, pour innocente qu'elle fût. C'étaient des classiques, des gens à qui l'ensemble seul importe.' *La Vie de Emile Duclaux*, par Mme. Em. D., Laval, 1906, pp. 243, 247-248.]

⁶ Vol. ii, pp. 641 ff.

⁸ [Mental things which are realities of course within the mental world.]

⁷ In an article criticising Pragmatism (as he conceives it) in the *McGill University Quarterly* published at Montreal, for May, 1904.

⁸ This is meant merely to exclude reality of an 'unknowable' sort, of which no account in either perceptual or conceptual terms can be given. It includes of course any amount of empirical reality independent of the knower. Pragmatism is thus 'epistemologically' realistic in its account.

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William James

William James, son of the theologian Henry James, Sr. and brother of the novelist Henry James, was born in New York in 1842. From 1872 to 1907 he taught at Harvard, moving from physiology to psychology and finally to philosophy. Jamesian Pragmatism and Radical Empiricism became dominant influences in American philosophical thought during his lifetime and have retained this position to the present day. James' major works, in addition to *Pragmatism*, include *The Principles of Psychology*, *The Will to Believe*, *The Varieties of Religious Experience*, *A Pluralistic Universe*, and *Essays in Radical Empiricism*. He died in 1910.